Clinical Lectures
ON
PAIN AT THE HEART AND PALPITATION.

Delivered in King's College Hospital,

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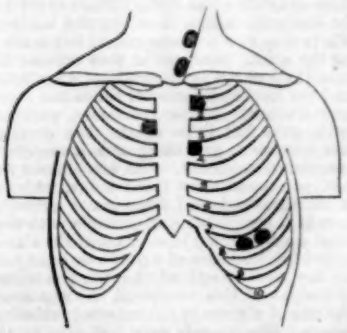
LECTURE I.—(*Concluded.*)

IN the next case we had repeated opportunities of exploring the sensibility of the præ-aortic, the præcordial, and the lower cervical regions, as this patient was in the hospital for some weeks, and he was examined several times at suitable intervals, both by Mr. Silk, the house-physician, and myself, and the painful spots were carefully marked. He also derived much benefit from local as well as general treatment.

George K——, aged twenty-two, was admitted into King's College Hospital complaining of pain and weight in the cardiac region, the pain shooting down the left arm. The attacks of pain were very severe at times, and prevented him from sleeping; the pain was also much aggravated by exertion. He suffered also from dyspnœa. Had never had acute rheumatism or other acute disease. His father died

FIG. 2.



of heart disease. Twelve months ago he used to suffer from momentary attacks of loss of consciousness, which were followed by some dyspnœa, and he was unable to work for two or three days after the attacks. His countenance was pale and anxious, and he looked much older than his age. On examination of the chest, the area of cardiac dulness was found to be much increased; the apex-beat was diffused, and felt in the seventh interspace an inch and a half outside the nipple line. A loud double murmur was heard at the base of the heart, most intense in the aortic area, but conducted in all directions over the cardiac region and into the large vessels on both sides of the neck. There was notable pulsation of the carotids and brachials. The radial pulse was collapsing, 84; the arterial coats thickened and uneven. The sphygmograph gave the characteristic tracing of aortic regurgitation.

As "pain at the heart" was a very marked feature in this case, a careful examination was made, with a view of discovering any specially painful spots, and the following points were found extremely tender on pressure with the point of the finger. Two points close together over the cardiac apex, which beat in a diffused manner in the seventh interspace; a point in the third left interspace, close to the sternum; a similar point in the first left interspace; a similar point at the sternal end of the second right interspace, and two points over the course of the vagus in the neck, just in front of the anterior border of the sterno-mastoid, one immediately above the supra-sternal notch, the other about an inch and a half higher up.

The treatment of this patient consisted of rest in bed and a diet composed largely of milk; small doses of digitalis with citrate of iron, sometimes with ether and ammonia; occasional hypodermic injections of morphia when the cardiac pain was very severe; and small flying blisters over the base of the heart.

He remained in the hospital seven weeks, and left greatly improved in health, the pain and dyspnœa both greatly relieved. The situations of the painful spots are indicated in this diagram. (Fig. 2.) We may believe that in this case there not only existed neuritis of some of the nerves of the cardiac plexus, but also some chronic myocarditis, and more or less degeneration of the cardiac muscle. Hence the pain at the apex, where the degeneration is usually most advanced, while the number of painful spots over the cardiac base and along the course of the vagus pointed to a somewhat diffused neuritis of the cardiac nerves.

Another case somewhat similar to the preceding is in one of my beds in the hospital at the present time. In this case, however, we have had occasional paroxysmal attacks of cardiac pain, bringing it more nearly into the category of cases of angina pectoris, and these paroxysmal attacks have been relieved by the administration of nitrite of amyl. In this case also there has been marked tenderness on pressure over the course of the vagus in the neck. The following is a brief abstract of the case from the notes of my clinical clerk, Mr. C. G. Hodgson.

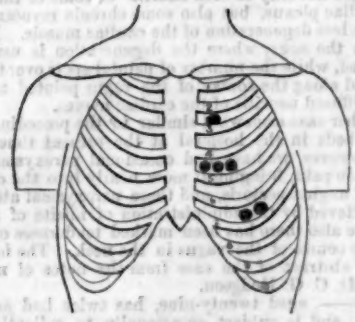
W. L——, aged twenty-nine, has twice had acute rheumatism, and is subject occasionally to epileptic attacks. Complained on admission of having suffered much from pain in the cardiac region for the past two months. The pain, beginning in the region of the heart, spreads over the whole of the left side of the chest, and is associated with much dyspnœa. The physical signs pointed to considerable cardiac hypertrophy, and to the existence of both obstructive and regurgitant aortic valve disease. Very marked pulsation of vessels both in the neck and arms. This patient was at first much relieved by counter-irritation, in the form of flying blisters over the cardiac base, together with small doses of morphia in ether mixtures. Subsequently he was attacked at night with paroxysms of pain and dyspnœa of an anginal character, and these were completely relieved by inhalation of nitrite of amyl. In this case, as in that of Geo. K——, there were very distinct tender points on pressure over the course of the vagus in the neck, as well as in the first and second left intercostal spaces close to the sternum.

The next case is one of considerable interest, not so much because of the existence of cardiac pain, although it is on that account that I now call your attention to it, but because of the co-existence of chronic inflammation and induration, and contraction of the left lung, with repeated attacks of hæmoptysis as a consequence of chronic mitral valve disease of eleven years' standing, itself the consequence of repeated attacks of acute rheumatism. The interesting aspects of this case from the point of view of pulmonary pathology I shall hope to have another opportunity of presenting to you, but now I introduce it for the purpose of illustrating the subject of cardiac pain, and this time it is associated not with aortic, but with mitral disease.

M. H——, a female, aged thirty-two years, has been under my observation for more than four years both as an out-patient at the Brompton Hospital and as an in-patient in this hospital. For the present I must confine myself to the consideration of her complaint of "pain at the heart," for which she was admitted into the hospital in the spring of last year. At that time she was suffering from severe pain in the cardiac region, extending into the back between the shoulders. The heart, which presents evidences of hypertrophy, is much uncovered by retraction of the left lung. The apex-beat is diffused and heaving, and attended with a palpable thrill. There is also visible and palpable pulsation in the second and third left interspaces; loud murmurs, varying occasionally in rhythm, are heard widely over the cardiac area; sometimes both a presystolic and a systolic murmur can be heard; at other times a loud systolic murmur only can be distinctly recognised, loudest over the apex. On exploring the following painful points, as shown in the diagram (Fig. 3). One in the second left interspace, where pulsation the cardiac sensibility we made out clearly the existence of is strongly marked; three points close together in the fourth interspace, and two points close together over the rounded apex in the sixth interspace. In this case also there exist no doubt tendencies to chronic changes in the cardiac muscle of an inflammatory and degenerative nature, conferring upon it a morbid sensibility, which becomes evident on exploratory pressure over the superjacent parts of the chest wall. By rest in bed, small doses of digitalis and iron,

the local use of the belladonna and chloroform liniments combined, but chiefly through the influence of counter-irritation in the form of small flying blisters, the pain was relieved, the cardiac action regulated, and her health generally improved, and she left the hospital, after a stay of six weeks, in very fair health. As you might suppose, she has again come under observation, and her case will

FIG. 3.

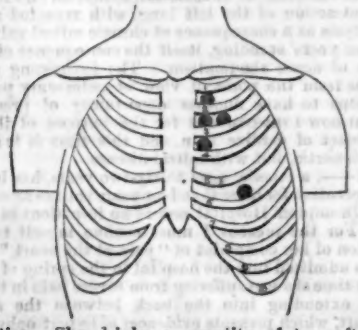


again afford us an opportunity for clinical study, but next time from a different point of view.

The next case is one in which the cardiac disturbance was purely functional, and although this patient had suffered from palpitation and pain at the heart for a long period, after a few weeks of appropriate treatment she was completely relieved.

L. D——, aged twenty-five, a housemaid, accustomed to carry heavy trays upstairs, came under my care at the Brompton Hospital recently complaining of "pains at the heart darting through the chest," and of "palpitation." She could not move without distressing palpitation, from which she had suffered for many years. This had been aggravated during the preceding six months and accompanied with dyspnœa and throbbing in the heart. The pain, referred to the centre of the chest, was worse after taking food, and also on attempting to go upstairs, and she often had to stop and sit down on the stairs. She also suffered from dysmenorrhœa, from flatulence and

FIG. 4.



constipation. She drinks a quantity of tea, often three times a day. Her cheeks were slightly flushed, but her lips and gums were pale and bloodless. On examination of the chest the heart's impulse was seen to be greatly exaggerated, and the large vessels at the root of the neck pulsated strongly. Pulse 120. No abnormal cardiac or vascular murmur could anywhere be detected. On exploring the cardiac sensibility with the tip of the finger the following painful points could be made out distinctly as in the diagram (Fig. 4)—viz., a point at the sternal end of the first, second, and third left interspaces, and another immediately over the apex-beat. She was ordered to abstain altogether from tea, and she was given three minims of tincture of digitalis in an ounce of the calumba and iron mixture of the Brompton Pharmacopœia three times a day, and a pill of aloes and nux vomica daily after dinner. A week after the commencement of this treatment she reported herself as much freer from pain and palpitation, and as feeling stronger. The pulse was reduced from 120 to 108. After a second week the pulse was reduced to 84, and she felt better "in every way." The painful spots were less sensitive, and that over the apex had disappeared. At the end of a month she was quite well and the painful points had entirely gone. Now this appeared to be a well-defined and instructive case of disturbed cardiac innervation, and a painful state of the cardiac muscle induced by the abuse of tea, and by the defective blood formation due to the dyspepsia also set up by this agent, while the morbid cardiac condition was no doubt augmented by the severe muscular exertion she was called upon to perform in connexion with her occupation. The rapid and complete relief of the long-standing cardiac pain and palpitation was as instructive as it was gratifying.

The following case is, in some respects, parallel to the one I have just cited, but it has this special interest that the attacks of pain were sudden and paroxysmal, approximating it to true "angina," and bringing into relief the true affinity between these minor attacks of cardiac pain and the graver cases of angina pectoris.

Elizabeth E——, aged twenty-one years, also a housemaid, had suffered from severe pain in the cardiac region, first brought on by carrying heavy trays upstairs. The pain came on suddenly two or three times a day, and extended down the left arm, which went "stone cold," to use her own expression. She also complained of much pain in the left vertebro-scapular region, and there was some tenderness on pressure over the intercostal spaces in this region. She suffered also from dyspnœa, and was losing flesh. There was a flush on the cheeks, and she complained of headache. There was no abnormal cardiac or vascular murmur. Pulse 100, feeble, and of low tension. On testing the cardiac sensibility marked tenderness was found in the third left interspace, close to the sternum, the tenderness extending outwards for about three-quarters of an inch. There could be no doubt about the distinct localisation of extreme tenderness in this spot. There was also a tender point, but much less sensitive, over the apex. She was at first ordered the calumba and iron mixture of the Brompton Pharmacopœia three times a day, and the local application of the mixed chloroform and belladonna liniments. This treatment, persevered in for four weeks, gave but little relief. The cardiac pain and tenderness remained, and there was a certain amount of general nervous disturbance. She was ordered five grains of bromide of potassium three times a day, with the calumba and iron mixture—a form I have found exceedingly useful when there is a combination of anæmia with neurotic symptoms—and a small flying blister, about the size of a florin, to be applied for two hours at a time over contiguous spots at and near the sternal end of the third intercostal space. After a fortnight of this treatment she was much relieved, and at the end of six weeks she reported herself as better in every respect. She scarcely ever had pain in the chest or arm, and the tender points in the præcordial region had disappeared.

It must be remembered that these cases have been selected, out of a vast number of other patients complaining of a variety of chest affections, because of the special features they presented. In this last case we no doubt had a form of cardiac neuralgia, probably induced by cardiac strain or over-fatigue, and having many points in common with angina pectoris. It is remarkable how in this, and many other like cases, the cardiac tenderness seems to be specially localised about the sternal end of the second or third intercostal space, and how completely the symptoms were relieved by counter-irritation over this spot.

The next case, to which I wish to call your attention, bore a strong analogy to the two preceding ones, and is very instructive as bridging over the not very wide gap, I imagine, which separates these cases from true angina pectoris; and the fatal termination of this case, after only a few months' illness, shows how grave was its character. This patient, a stout, healthy-looking, single woman, twenty-nine years of age, was also in the habit of carrying heavy trays upstairs in her occupation as a waitress. Her family history was good, and, except two or three attacks of bronchial catarrh, her previous health had been good. She first came under my notice in January, 1881, as an out-patient in this hospital, complaining of "pain at the heart." She stated that she was perfectly well eight months ago, but about that time began to suffer from sharp attacks of pain in the cardiac region, shooting down the left arm, coming on suddenly on any exertion, such as carrying heavy trays upstairs, and it was after an exertion of this kind that the pain first came

on. She describes the attacks as of a "stifling" character, as she cannot "move the chest to breathe," and the pain, which, not very severe at first, has gradually increased in severity, shoots into the left shoulder and down the left arm, and leaves the arm "cold and numb." You will remember that in the preceding case the patient said her left arm went "stone cold."

Before examining the patient's chest I pointed out that her attacks resembled those of angina pectoris, and that we might or might not discover the existence of some organic disease of the heart. After the most careful examination of the heart, in which one of my colleagues joined, no distinct cardiac murmur could be made out, but I called attention to an alteration in the sounds over the aortic area, which I ventured to predict would become altered into murmurs. There was a slight roughening and prolongation of the first sound, and a marked accentuation of the second sound. Moreover, there appeared to me to be a loss of resonance on the right side of the sternum over a very limited area corresponding with the second and third cartilages and second interspace, which made me think of dilatation of the aorta or of the possible development in that situation of an aneurismal sac. A fortnight later the roughened first sound had become a distinct systolic murmur, and the accentuated second sound ended in a diastolic bruit, which was conducted downwards to the left of the mid-sternal region. As the paroxysmal attacks of pain had gradually increased in severity and in frequency, coming on now on the least exertion, and sometimes even when in bed, she was induced to come into the hospital. She had many attacks while in the hospital, but they were by no means of that agonising character sometimes seen. For the first three weeks she improved; the attacks were only momentary, and occurred with a good deal of irregularity; sometimes she would have two in a day; sometimes she would go a week without an attack. In the intervals she felt quite well. The attacks would often occur when she began to get up in the morning or after walking about a little in the ward. We tried iodide of potassium without benefit; flying blisters over the cardiac base relieved her somewhat. In the beginning of March her attacks became more frequent, and we gave her nitrite of amyl, but without any good result; then we tried nitro-glycerine in gradually increasing doses. We began with half a minim of the one per cent. solution, and increased it to three minims three times a day. Under this treatment she mended somewhat, and, feeling better at the end of March, she left the hospital by her own wish to visit some friends, and promised to return in a week, but the very day she was to have returned to the hospital she died suddenly, after bringing up a quantity of blood. Unfortunately we could not get a post-mortem examination. I regret also that I had not then adopted the mode of exploring the cardiac sensibility, which I have applied in all the other cases I have brought before you, as well as in many others, into the particulars of which it would take up too much of our time to enter.

These last three cases, varying so greatly in severity and seriousness, appear to me to have many points in common. Their causal relationship is obvious. All three patients were young women in fairly good health, with no antecedents leading to cardiac disease, save that they were all of them engaged in the same kind of occupation, and they all three complained of the effects of carrying heavy trays upstairs. In the first and slightest of the cases the cardiac disturbance was undoubtedly aggravated by the abuse of tea. In all three, but especially in the last two, the symptoms complained of bore a striking likeness to one another. In neither of them, when first seen, was there any definite cardiac murmur. May we not trace the varying effects of cardiac or vascular strain in each of them? In violent and sustained muscular efforts there is increased action of the cardiac muscle on the one hand, and increased resistance at the periphery from muscular compression of the arterioles and capillaries on the other. If the cardiac muscle is weak and anæmic, as a part of a general anæmia, then the ventricular wall may yield and become dilated, and we may get palpitation and pain associated with fatigue and mal-nutrition of the cardiac muscle, as was no doubt the case with the first of these three, and probably to some extent with the second. But supposing the tone of the cardiac muscle to be good, and its contractions sustained and vigorous, then we should expect the strain to be felt especially in the first part of the aorta, for it has to endure a twofold distending influence: it has to bear the increased impetus of the ventricular outflow, increased both in force and frequency, and the increased resistance in the peripheral vessels. Under these influences it may become the seat of chronic inflammatory changes (as we know it constantly does), which may extend to and involve the nerves of the cardiac plexus in relation with its walls, or a particular weak portion of its wall may yield and dilate and become the seat of an aneurismal sac, as was most likely the case in the third patient.

The causation, the localisation, the pathological relations, and the treatment of cardiac pain in the various cases which come before us in which this symptom occupies a prominent place, are well deserving of your careful and continued investigation. It is for this reason I have brought the subject under your notice in some detail, and have described to you a method of exploring the sensibility of the cardiac and aortic regions, which promises to be as instructive as it is simple.

CARCINOMA OF THE LEFT LUNG AND PLEURA.

WITH REMARKS.

BY HENRY DAVY, M.B. LOND., M.R.C.P.,
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I AM indebted to Mr. W. Brewster, then clinical assistant to the hospital, for many of these notes.

Philip S——, aged forty-three; admitted July 21st, 1881. The patient has a good family history. He has worked in a sawpit, and has enjoyed good health up to the date of his present illnes. Eight months ago he began to suffer from a troublesome cough, and after a time he became a patient under one of my colleagues in the Exeter Dispensary, by whom he was treated for phthisis. Subsequently he came under my own care, and, finding dulness and bronchial breathing at the left apex, I also considered it a case of phthisis for two or three weeks. Finding that his symptoms were hardly explicable on this view, I examined him more carefully, and persuaded him to enter the hospital under my care.

On admission. — The patient is a tall thin man, with an unhealthy-looking and emaciated appearance. His complexion is sallow, and there are venous stigmata about the cheek and nose. Lately he has lost flesh very rapidly, and he now has no appetite for any kind of food. There has been no hæmoptysis, but he has a very severe cough, especially at night, and he expectorates a good deal of phlegm. He complains of great pain in the left side, which, he says, sometimes causes him a "perfect agony." He cannot sleep at night, being kept awake partly by pain and partly by the cough. His bowels are constipated, but his tongue is clean and moist. His pulse is regular, but weak, and his temperature is about normal.

On examination, the heart, liver, and right side of the chest appear quite normal; urine contains no albumen, specific gravity 1020. The left side of the chest hardly moves at all in respiration. It is almost universally dull both back and front, and there is a great feeling of resistance to the percussing fingers. Tactile vibration is entirely lost, but no ægophonic sounds can anywhere be detected. Scarcely any air can be heard entering the lung either behind or in the axillary line, but in front, from the clavicle to the nipple-line, there is bronchial breathing. The intercostal spaces do not bulge—in fact, they appear flatter than on the right side, and by careful measurement it is found that the left side is rather more than an inch smaller than the right. Vocal resonance is everywhere diminished, and there is no bronchophony or pectoriloquy at any part of the chest. The chest was punctured by an aspirator in several places, but no fluid was found. The aspirating needle appeared to enter solid matter even when it was passed into the chest fo a couple of inches.

From this date (July 21st) patient steadily got worse. He was very restless at night, and the pain in the left side was very severe, in spite of all the usual treatment for this symptom. He could not sleep at night, and he lost both appetite and weight. His heart began to fail, and on Aug. 11th the liver became enlarged and some ascites was

detected. In deference to expressed opinions that there might be fluid in the chest, an aspirating needle was more than once used, but always with the result that no fluid was found. The ascites steadily increased, the measurement round the umbilicus being about one inch larger every day, while œdema of both legs and scrotum was also developed. His morning and evening temperature were about normal, but his pulse was often very weak and rapid. I dictated the following note:

Aug. 18th.—Patient is very restless, and is obliged to sit propped up in bed. His breathing is very quick and shallow, and he complains much of pain in his left side. There is œdema of the legs, more especially the left, and the scrotum and prepuce are also œdematous. Liver dulness commences at the fifth rib, and extends almost down to the umbilicus. The enlargement is evidently due to congestion, is smooth and uniform, the liver edge being easily felt just above the umbilicus. As he sits up in bed the dulness due to the ascites commences three fingers' breadth below the umbilicus, while there is dulness in both flanks continuous with the liver dulness above. A distinct thrill can be felt from side to side through the fluid. Lungs: Behind on the right side the air does not enter well at the extreme base, and there is a slight amount of râles, probably due to œdema of the lung. The rest of the lung, both back and front, is normally resonant, and the breath sounds are puerile over it. At the extreme base of the left lung the percussion note is altered by intestines or stomach, but everywhere else the percussion note is absolutely dull. Very deep inspiration is accompanied at the extreme base by a coarse gurgling râle, higher up by a good many coarse râles, but over the greater part of this lung no air can be heard entering at all. Heart sounds appear normal, and the apex beat is hardly if at all displaced. From this date the patient became weaker and his breathing more and more shallow, and on Aug. 31st he died. Unfortunately I could not be present at the post-mortem, which was made by Dr. Blomfield, the house-surgeon. The lung was, however, kept for my inspection. I dissected out the root of the lung, and made sections of the tumour, whilst some very beautiful sections were also made for me by Mr. W. Brewster and by Dr. Heneage Gibbes, curator of the Anatomical Museum, King's College.

Necropsy.—Chest: On opening the thorax a considerable quantity of straw-coloured fluid escaped from both pleural cavities. On the right side the pleura appeared to be healthy, no thickening being found on any part either of the costal or visceral layer. The lung too was crepitant throughout, and, with the exception of some œdema, appeared quite normal; its weight was 1½ lb. On the left side the lung was bound back in the vertebral groove, and was covered all over by a thick layer of a yellowish-white colour, which fixed it so tightly to the costal surface that it was removed with great difficulty. The whole of the costal pleura from base to apex was very greatly thickened, and was of the same yellowish-white colour as the pleura over the lung. In some parts the thickness of the costal pleura was two inches, and in no place was it less than half an inch. When cut into it had a hard, fibrous feel. The space between this thickened pleura and the lung was filled with straw-coloured serum. On removing the lung and cutting into it, it was found to be covered all over with a thickened pleura, from all parts of which the lung tissue itself was invaded by bands of a similar nature to the thickened pleura. In parts the lung tissue was entirely destroyed, this being especially true at the apex, base, and in the neighbourhood of the root of the lung. In these situations the lung was completely solidified and airless, almost white, and cut with a fibrous feel. The parts contiguous to these were solidified and airless, but the black mottling of lung tissue could be recognised; while in some parts the lung was imperfectly crepitant. On dissecting out the root of the lung it was evident that the new growth was oldest and most advanced in this situation. Around the principal bronchus it was of considerable thickness, a large mass of it almost obliterating the bronchus embedding the bronchial glands, and spreading for some distance around the divisions of the bronchi into the lungs. The bronchial glands were enlarged, but most of them could be recognised in the midst of the growth, by which they were often comparatively little invaded. Some, however, were much invaded by the growth, and one which contained a small mass of calcareous matter had very little glandular structure recognisable. In no part of the lung were any dilated bronchi or cavities to be found. Weight of lung *plus* mass of new growth removed with it, 3lb. 14oz. Heart and pericardium: The pericardium contained some straw-coloured fluid, but no growth. The heart (left side) was normal; the right side was dilated, and the muscular walls slightly thickened. The abdomen contained a large quantity of inoffensive dirty-yellow-coloured fluid. The intestines were normal. The liver was large, smooth, and congested; no new growth anywhere in it. The kidneys were large, red, and congested, otherwise normal; the spleen was healthy; the abdominal glands were not enlarged. The head was not examined. Parts of the lung and pleura were hardened in Müller's fluid, and the microscopic examination of the sections made proved that the new growth consisted of a large amount of fibrous stroma, with masses of cells in the interstices; and there was no doubt that it was a carcinoma.

Remarks.—The rarity of cases similar to the one above related must be very great, for I have not been able to find any other recorded in which the physical signs were at all so well marked. It is true that cases are described in which large patches of dulness over thickened pleura were found; but in this instance the dulness was over the whole left side of the chest, and to a superficial examination resembled that found with a large pleuritic effusion. That it was not an ordinary case of pleurisy was, however, clear from the date of admission, the "diminished size of the chest" and the "flattening of the intercostal spaces" making the diagnosis of fluid improbable even before the use of the aspirator proved that fluid was not present. Nor was the condition of the patient like that of a man who had recovered from an acute pleurisy with a much thickened pleura. The absolute dulness of the whole side of the chest, the almost complete absence of breath sounds, the great pain patient suffered, together with his rapid emaciation and general appearance, proved that the primary cause of his illness was much more grave. In fact these symptoms, together with the others I have described, indicated to my mind that he was probably suffering from malignant disease of the lung and pleura; and during the course of his illness I saw no reason for considering any other diagnosis more compatible with his symptoms. The alternative diagnosis seemed to be that of "cirrhosis" or "fibroid phthisis" of the lung with thickening of the pleura, and there were several reasons for taking this view of the case. His dusty work in a sawpit was just that which might start the cirrhotic change, and this change limited (as it usually is) to one lung, with thickening of the pleura, have produced all the physical signs we have described; while the cause of his illness, with the failure of the heart, congestion of the liver, and ascites, was just that which ordinarily heralds the termination of advanced cases of cirrhosis of the lung. On the other hand, cirrhosis of the lung is very gradual in its onset, and very slow in its progress. The patient had enjoyed good health up to eight months previous to admission, and had performed laborious work up to that time without difficulty. It was very unlike cirrhosis of the lung to have increased so rapidly as in eight months to produce the physical signs I have described, especially as during this time the patient had been removed from all the causes by which the cirrhotic change in the lung would be kept up. These physical signs could only be produced by the most advanced cirrhosis of lung tissue, and that this should have begun almost suddenly and increased so rapidly was extremely unlikely. Nor would this pathological change have accounted for the pain I have described, and which I have said often amounted to great agony. A diagnosis of malignant disease of the left lung and pleura was therefore made and maintained from the first, and this diagnosis was completely verified by the post-mortem examination. The disease evidently commenced at the root of the lung, extending along both the visceral and costal layer of the pleura. Early in the case it apparently surrounded and almost obliterated the principal bronchus, and to this cause is probably due the collapse of the lung, which was found bound down with carcinomatous pleura in the vertebral groove. The extent to which the lung itself had been invaded was very great, so that very little crepitant tissue was left. Considering the probable seat of origin of the carcinoma at the root of the lung, I was surprised at the absolute freedom of the right lung and pleura from any trace of the growth, and it is also to be remarked that no secondary growths were discovered anywhere. As to treatment, sedatives of all kinds, with digitalis and stimulants for the failure of the heart, were freely used, but without any good effect whatever.

YELLOW FEVER has broken out at Brownesville, Texas, and is spreading with alarming rapidity.

THE TREATMENT OF DYSENTERY.

BY J. B. SCRIVEN,
LATE CIVIL SURGEON OF LAHORE.

THE following observations suggested themselves to me on perusal of Dr. Stephen Mackenzie's two interesting papers in THE LANCET of April 22nd and 29nd, on the Treatment of Chronic Dysentery by Voluminous Injections of Nitrate of Silver. My remarks, however, refer principally, though not wholly, to the acute form of the disorder. I shall first say a few words on the point which forms the main subject of this paper—namely, the use of enemata in dysentery, and afterwards describe briefly the mode of treatment which I have found most successful.

1. *The Use of Enemata.*—The treatment of dysentery by large enemata, proposed by Dr. O'Beirne in 1822, was first extensively carried out by Surgeon-General E. Hare,[1] who at the time of the second Burmese war, 1852-53, was in medical charge of the 1st European Bengal Fusiliers, to which I was an assistant-surgeon. He had used this remedy for several years before he went to Burmah, and he wrote about it in the *Indian Annals of Medical Science* of April, 1854. He considered the large enema applicable both to acute and chronic dysentery; he recommended an injection of "warm water, without limit in quantity, till the patient complained of the distension, and the abdomen was visibly enlarged," and he sometimes medicated the water with sugar of lead, alum, or nitrate of silver. In fact, he maintained that large injections, combined with copious doses of quinine by the mouth, formed the true and rational treatment of a disease produced by malaria and characterised by ulcers of the large intestine. He administered his injections with a long flexible tube having one opening at the end, but none at the sides, and he passed it "above the sigmoid" flexure.

Following Mr. Hare's instructions, I also tried these large injections in some of the very severe cases I met with among the soldiers in Burmah, but I found them by no means so generally applicable as Mr. Hare believed. I, as well as many others, thought it undesirable to distend the abdomen as he recommended, and not always safe to pass the long tube through the sigmoid flexure; but I found, as Mr. Hare himself admitted, that often the enema could be effectually administered with the ordinary tube two or three inches long, or if not, with one of six or eight inches. But I found, on the other hand, that in the acute stage of dysentery the remedy in many instances was impossible, or was productive of so much distress that it could not be repeated. Nevertheless I know that it sometimes cured. An officer once applied to me immediately on the occurrence of the symptoms; I administered one large enema of warm water, I gave him four grains of opium immediately afterwards, and I heard no more of his dysentery. This is a parallel case to the single one recorded by Dr. Wood of Philadelphia,[2] in which acute dysentery was cured by three nitrate of silver enemata, the advantage being so far on the side of simple water.

In cases, however, in which ulceration has supervened upon the acute stage, the large enema is invaluable. In these I have steadily employed it through the whole course of my practice. In many instances I have simply used warm water, in others I have dissolved in it an astringent salt. The astringent I have invariably used of late has been alum, though a long time ago I tried nitrate of silver and acetate of lead. These two I abandoned, not because they failed or that I found them injurious, but because I thought they might some day produce symptoms of poisoning. This has not been lost sight of by Dr. Mackenzie, who mentions the suggestion of Dr. Wood (with instances from his own cases), that in the event of an enema of nitrate of silver being retained for twenty minutes, common salt should be injected as an antidote; but it appears to me that, if retention were to take place when the intestine was already well filled with fluid, it might be impossible to introduce a sufficient quantity of any antidote to neutralise the poison. However, I have found alum answer so well that I have had no reason to try anything else.

What is the best mode of administering the large enema? Mr. Hare proposed first that the patient should be laid on his right side, with his pelvis a little raised, and his legs slightly flexed. This favours gravitation of the fluid into the transverse and ascending colon, and is, I think, an easier position to the patient than the lithotomy position adopted by Dr. Mackenzie and Dr. Wood. Secondly, Mr. Hare insisted on the fluid being slowly injected, and if there was any griping the injecting process was to be stopped till this had ceased. Both of these precautions I consider essential to success. I never timed myself in giving the injection, but I think eighty ounces of fluid ought to occupy from ten to fifteen minutes. Nor have I been accustomed to test the temperature of the water with the thermometer, but my object has been to begin with it somewhat warmer than the body, perhaps 102° F., to allow of a little cooling during administration.

As to quantity, the large intestine will hold, in some cases, six imperial pints. As a rule, I order four pints to be prepared, and as much of this to be used as can be introduced without distress to the patient. If all these precautions are not observed, the remedy soon falls into disrepute.

An important, indeed essential, adjuvant to the large enema is the small enema. By the small enema I mean one of not more than three or four fluid drachms, containing thirty or forty minims of tincture of opium and a little mucilage. This, if given warm, is generally retained for some time, and often produces quietude of the bowels and sleep for several hours. The best instrument for it is a glass urethral syringe. If given cold, or if more than half an ounce be used, the small enema also fails in its purpose, and is soon expelled.

2. *The Treatment of Acute Dysentery.*—Dysentery most commonly begins in the night, and private patients very frequently apply to their medical attendant early in the morning. In a great number of cases diarrhœa has preceded the dysentery for a day or two, and the evacuations have often been of a light colour, indicating deficiency of bile. Be this as it may, a patient applying during the preliminary diarrhœa, or early in the morning after the supervention of dysenteric symptoms, is in many instances at once relieved by five grains of calomel, followed in three hours by from three to four drachms of castor oil or thirty grains of Gregory's powder. No opium should be given with any of these things. The effect often is an immediate cessation of the symptoms, there being no evacuation after the calomel, till the castor oil or rhubarb begins to act, this producing two or three liquid bilious motions without griping or tenesmus. This treatment saves the strength, being less depressing than an immediate resort to ipecacuanha. I always forbid any kind of food or drink between the dose of calomel and the aperient, but allow some warm tea or chicken broth an hour or two after the latter. A day or two of rest with careful diet, and a little bark or quinine, with nitro-muriatic acid, in such a favourable case, will complete the cure. But suppose the calomel to have been given at 7 A.M., the castor oil at 10 A.M., and that, in spite of these, the dysenteric symptoms continue during the afternoon, with frequent purging and tenesmus, I then order eight leeches to the anus. These give so much relief that the patient can generally lie quiet for them to complete their work, and when they come off, a small enema is administered. Evening is now approaching, and about twelve hours after my first visit I order twenty grains of ipecacuanha with one grain of opium, in four pills, to be taken at once. The effect of this and the other remedies combined is commonly to produce a peaceable night, perhaps disturbed by one attack of vomiting, which I always advise the patient to avert, if possible, by lying perfectly quiet. If there is any dysenteric purging, the ipecacuanha and opium pills and the small enema are repeated after a second period of twelve hours, and similar instructions are given for each successive period of the same length. But if during any twelve hours' interval there is no dysenteric purging, the ipecacuanha is omitted, and a dose of castor oil (three or four drachms without opium) is taken, instead of any other medicine. It is well, for obvious reasons, to give this early in the day, so that I sometimes postpone it till the morning, giving an opiate overnight. One or two fæcal evacuations are probably the result, and the disease is at an end. Diarrhœa may remain, which I have often been able to check with small doses of quinine, sulphuric acid, and laudanum, or by some preparation of the bael[3] fruit. Tea with a small quantity of milk, or chicken

[1] See Dr. Joseph Ewart's paper on Tropical Diseases, Indian Annals of Medical Science, vol. viii., p. 369.
[2] Philadelphia Medical Times, Oct. 27th, 1877.
[3] See Sir Joseph Fayrer on Tropical Dysentery and Diarrhœa, p. 172.

broth, is the only food allowed during the active treatment, not more than a small teacupful every four hours; the nauseating effect of the ipecacuanha generally sufficiently limits the appetite. Such is the course of dysentery, in most cases, that apply for relief within the first three or four days. If the treatment be commenced later there is some danger of the disease running on to ulceration. When this has happened ipecacuanha, unless it be in one or two grain doses, is no longer useful. The time has come for the large enema and the bael fruit. The quinine mixture, with opium, just mentioned, also answers well in this stage, but I seldom give it if bael can be procured. Other drugs might also be named as substitutes for bael, and one of the best is tannic acid. The large enema may at first consist of simple water, but if improvement is not very marked, after two injections, I add to it alum, in the proportion of one grain to the ounce. Once a day is often enough for this remedy, as it is rather a tax upon the patient's strength. The evening is the best time, one or two grains of opium being given by the mouth, and the small enema by the rectum, as soon as the large one comes away. From this, good rest is obtained at night, and if another small enema be given in the early morning, there will perhaps be complete quietude of the bowels till the injection is repeated the following evening. If the evacuations (including the fluid of the large enema when passed away) be carefully examined every day, while they are being slowly poured from one vessel to another, the amount of benefit is readily ascertained, as well as from the appearance of the patient and the diminished frequency of his pulse. After a variable time solid fæces are discovered, and the products of ulceration are no longer found. The enemata may now be discontinued, and the opium by the mouth gradually reduced. The bael should be persevered with for an indefinite time, as it is a useful tonic to the mucous membrane, and a regulator of the alvine evacuations.[4] The return to ordinary diet must in all cases be slow and cautious. I have generally found my patients able to eat a little tender meat before they could venture upon vegetables, of which latter the bael supplies the place, and this remedy is particularly advantageous when there is any scorbutic taint.[5]

The treatment I have just described is that which I have been accustomed to use for adult males. For delicate women or younger persons the doses of ipecacuanha and other things must be proportionally smaller. Fifteen or even ten grains of ipecacuanha I have often found sufficient for women. For children about thirteen months old, three or four grains of ipecacuanha with half a grain of compound kino powder act quite as favourably as the larger doses upon adults. Teething is often a powerful factor in these little patients, and great relief may be afforded by lancing the gums. In my experience the ipecacuanha treatment has not answered well in children much under a year. Up to ten months, at any rate, they do not bear well the nausea and starvation it involves. Children that are nursed, however, are not very liable to severe dysentery; it is the hand-fed children that give trouble. Up to about ten months I have found calomel answer better than ipecacuanha. For mild cases very small doses are sufficient, and an enema containing one or two minims of tincture of opium. In the more severe cases half a grain of calomel may be given, morning and evening, to a child eight or ten months old, and the enema twice in twenty-four hours. I have never found leeches necessary for a child, nor have I ever had to treat children in the stage of ulceration, as they have always recovered or succumbed before this has been reached. In young children I have been accustomed to stop all farinaceous food, and, except in infants at the breast, to limit the milk very much, giving beef-tea or chicken broth instead.

As to the amount of opium to be given in dysentery, this must depend upon the case. Adults will sometimes take an enormous quantity without producing narcotism, perhaps because it rapidly passes out of the body. So also with children; having begun with one or two minims in the injection the quantity may sometimes be increased far beyond what a child would be expected to bear.

In almost all cases of acute dysentery, both adults and children, I have of late years adopted the system above recommended of administering the medicines every twelve hours. The effect of a large dose of ipecacuanha lasts fully this time, and the long interval favours rest, which is especially desirable in a disease so strongly characterised by its absence. Occasionally I have departed from the system to the extent of giving four small enemata in twenty-four hours; in other cases, when the vomiting from the ipecacuanha has appeared to cause expulsion of the small enema from the rectum, I have given this in the middle of the twelve-hour period instead of at the end.

Thus far I have drawn the favourable side of the picture. Of the unfavourable cases I have little to say. When the stage of ulceration has been reached, the large enema sometimes fails to give relief, especially in persons past the middle period of life; the evacuations do not improve, the pulse becomes quick and feeble, emaciation proceeds rapidly, and the patient soon becomes too weak for anything but palliative treatment. In these the large enema must be discontinued, but the small enema, the bael fruit, mild doses of quinine, mineral acids, and opium should be persevered with, and may lead to eventual recovery. When the strength admits, large blisters over any obviously thickened part of the large intestine are sometimes decidedly beneficial.

The point at which acute dysentery ends and chronic begins is difficult to mark accurately; but of those cases that have continued under my care, I do not remember any resulting in the chronic form since I began to use large doses of ipecacuanha.

From first to last only a few cases of chronic dysentery have come before me, and these were at the General Hospital in Calcutta previous to 1861. I treated most of them, if not all, with the large enema, but the records are not now in my possession. The greater number were invalided soldiers, who remained in Calcutta till ships were ready to convey them to England.

The above observations have been drawn from European cases. The treatment of the natives of India is the same as regards medicines by the mouth; but otherwise it is different, and in the stage of ulceration it is generally unsatisfactory, as they object strongly to enemata of every kind.

Oxford-gardens, North Kensington, W.

[4] Indian Pharmacopœia, p. 46.

[5] See Dr. T. E. B. Brown's remarks on the Indian Pharmacopœia, Indian Medical Gazette of Dec. 1st, 1877, p. 309.

ABSCESS OF THE SPLEEN TERMINATING FATALLY THROUGH PERFORATION OF THE STOMACH.

BY WM. H. BULL, F.R.C.S. ED., L.R.C.P. LOND.,
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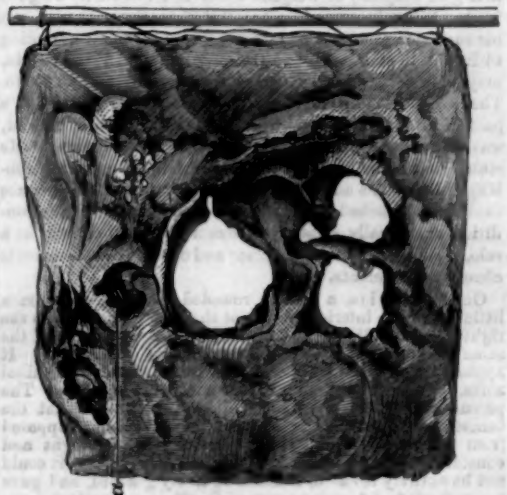
GEORGE D——, aged forty-two, a groom, married, with five children, presented himself at the Stony Stratford Dispensary on Thursday, Dec. 29th, 1881, with the following history.

His family history was very good. Was very healthy as a boy; had never had any illness. At the age of nineteen he entered the army, and was sent with his regiment the following year (1861) to India. There he remained for nine years, during which time he suffered from inflammation of the liver, and what he called "the fever," and had several attacks of ague. Was discharged from the army for ill-health, and returned to England early in the year 1870. While in India he was of very temperate habits, and when discharged received a certificate of extra good character. Upon his return to England he married in 1871, and became teetotaller for the first twelve months, after which he took to drinking, and has been a heavy drinker, more or less, up to the present time. Since his return from India has often complained of not feeling well, and constantly suffered from pain over the spleen, but has never had a return of ague. In 1875 he suffered from a very bad ulcerated throat, which had to be freely cauterised. In 1877 had another attack of the same kind, and shortly after that he suffered from inflammation of the lacrymal sac; this terminated in an abscess which burst and discharged for many months, and he got into a very low, weak state. He ultimately picked up again, and has enjoyed better health for the last two or three years. There is no history at all of syphilis, and no traces of that disease. For the last month he has been feeling very poorly, without any definite symptoms; has been extremely irritable, and on several occasions most impertinent to his master, his previous behaviour having been most exemplary.

Present illness.—On Thursday morning, December 29th, 1881, he got up at the usual hour and went to the stables at 6 A.M., feeling very poorly. At 7 A.M., on his way to breakfast, felt very sick, and suddenly vomited (according to his statement) at least half a pint of blood. This seemed to relieve him, and he felt better and more comfortable when he walked to the dispensary at 9 A.M. than he had done for some time. He was pale and anæmic and a good deal emaciated. On examining the abdomen, in the epigastric region immediately below and slightly to the left of the ensiform appendix there was a spot the size of sixpence, tender only on great pressure; the rest of that region was perfectly free from pain. The liver extended to the lower border of the eleventh rib. The spleen was apparently of normal size, and no pain or discomfort was experienced on pressure in that region. The thoracic organs were all perfectly healthy. The pulse was quiet, regular, rather weak, 76 per minute. Bowels constipated, and had been so during the last few days. He was ordered immediately to bed, with nutritious liquid diet (cold), and ice to suck *ad libitum*. Perchloride of iron, with morphia, was prescribed. On his return home that morning, contrary to orders, he went to the stables and attempted work, but, feeling so weak in the afternoon, was compelled to go to bed. Feeling still very poorly, he remained in bed the two following days (Dec. 30th and 31st), but got up on the third day (Jan. 1st, 1882), and being much better in all respects, went to work on Jan. 2nd, having had no pain during the last three days.

Jan. 3rd: Went to work as usual in the morning, but was so cold and thoroughly exhausted that at midday he went home and retired at once to bed.—4th: Passed a comfortable night, but woke early, feeling very sick, and at 7 A.M. vomited quite ten ounces of blood. Ice was freely given, and the usual treatment resorted to, after which he felt very comfortable. About 9 A.M. passed a very copious stool composed principally of blood. Nausea came on again in the afternoon, and at 3 P.M. vomited at least a pint of blood, after which he experienced considerable relief.—5th: Passed rather a restless night. Has had no sickness or nausea at all to-day, but complains bitterly of dreadful exhaustion and prostration with a good deal of troublesome headache; bowels acted once, composed of fæces and blood; has taken nourishment well.—6th: Passed a very restless night, being a little delirious at times. Early in the morning he had a severe rigor, which lasted twenty minutes; after the rigor had passed off he felt very sick, and suddenly vomited a pint of blood, which gave intense relief. In the middle of the day two large solid lumps of blood-clot passed the bowels. In the evening had another rigor similar to that in the morning; but this was not followed by nausea.—7th: Passed a better night but is very weak and prostrate; in the morning felt very sick and vomited ten ounces of blood, principally in large clots; this gave considerable relief, and he felt comfortable for the rest of the day.—8th: Passed a comfortable night. At 10 o'clock A.M. was seized with a most severe rigor lasting over twenty minutes, which left him so utterly exhausted that he never rallied, and in spite of all treatment got rapidly worse and died at 10 P.M., being conscious up to the last few moments of his life.

Necropsy of body, thirty-six hours after death.—Body a good deal emaciated, but free from marks and scars. Examination of abdomen: The liver was somewhat under normal size; the peritoneum covering it was more or less adherent throughout, especially on its upper surface, and in parts there were firm adhesions to the under-surface of the diaphragm. The organ was pale and firm, presenting on section a waxy, and in parts a somewhat nutmeg, appearance. On removing the stomach an abscess was found, the size of a small orange, in close relationship with the splenic extremity. This abscess was bounded in front by the splenic end and posterior surface of the stomach; on the outer, or left, side by the lower end of the spleen; below by the pancreas. It had perforated the stomach just where the splenic extremity and posterior surface meet, in four places; one of them freely admitted the index finger, two others admitted the little finger, and the fourth the top of a penholder. The lower part of the largest perforation was much thickened, and seemed to be in a most acute stage of ulceration. A medium-sized branch of the splenic artery, which ran by its side (on the posterior surface of the stomach), presented a perforation large enough to admit a very small pocket-case director; this perforation of the artery was situated just inside the abscess cavity. The abscess contained about an ounce of thick, dark, grumous matter. The mucous membrane of the stomach adjacent to these perforations was very vascular, and the veins gorged with blood, but that covering the rest of the organ was of natural colour, though very anæmic. The stomach contained about ten ounces of dark, thick grumous matter, the same as that found in the abscess; it was about the consistence of cream. The spleen was soft and pulpy, and almost broke down on removal; its substance throughout was of a deep brick-red colour, and seemed to present one homogeneous mass, which was of about the consistence of brain matter. Its lower part was entirely disintegrated, and in a state of ulceration, forming the outer boundary to the abscess wall. The pancreas was healthy; at the splenic end its upper surface was thickened, and entered into the formation of the abscess. The kidneys were of normal size, very pale, but quite healthy. The capsules were easily removed. All the other organs were found perfectly healthy. The head, at the request of the friends, was not examined.



Portion of stomach, showing the perforations; outer surface; *a* is a glass rod passed through the artery at the seat of perforation, the tissues surrounding which have been dissected sufficiently to expose the artery.

Remarks.—This case seemed to be clearly one of "ulcer of the stomach, with death from perforation." The appearance of the patient, his emaciated condition, his age and history in general made me strongly suspect that the ulceration was of a malignant type. The post-mortem examination, however, showed that perforation was secondary to abscess in the spleen. This abscess in perforating the stomach from without inwards had also perforated an artery; thus the cavity had been acting as a reservoir for the blood, which was discharged thence into the stomach, and this accounted, no doubt, for the somewhat long intervals between the vomitings of blood. With regard to the etiology, it is not improbable that hæmorrhagic infarction occurred during one of the patient's attacks in India, which had remained latent up to the fatal illness, and that consecutive inflammation and suppuration of the spleen were now accelerated by his intemperate habits and failing health.

APOTHECARIES' HALL OF IRELAND.—The following office-bearers have been elected for the ensuing year:—Governor: Thomas Collins. Deputy Governor: R. Montgomery. Court of Directors and Examiners: E. H. Bolland, John Evans, A. Harvey, Charles Holmes, Charles Henry Leet, Charles Frederick Moore, Henry P. Nolan, Richard O'Flaherty, Edward O'Neill, George Bolster Owens, John Ryan, James Shaw, and George Wyse. Representative on the General Medical Council: Thomas Collins.

SANITARY INSTITUTE OF GREAT BRITAIN.—The fifth Autumn Congress and Sanitary Exhibition of this institute will be held at Newcastle-upon-Tyne on September 20th to 30th, under the presidentship of Captain Douglas Galton, R.E., C.B., F.R.S. Prof. de Chaumont, M.D., F.R.S., has consented to give a lecture to the Congress.

ON A CASE OF ABDOMINAL ANEURISM.

BY S. M. SALAMAN, M.D.,
SUPERINTENDENT, DECCAN CENTRAL GAOL, POONA;
AND
E. D. MACKELLAR, M.B.,
POONA.

R. G——, Hindu, aged thirty-three, height 5 ft. 6 in., was admitted into the hospital of the Deccan Central Gaol on August 24th, 1880, and died on September 19th, 1880. At the time of entrance into gaol (four months before admission into gaol hospital) he weighed 90 lb. After death he weighed 71 lb. When he came into hospital he was a spare man, yet his condition must not be inferred from his weight according to European standards, as a Deccany Hindu of 5 ft. 6 to 8 in. may be in perfect health, and yet weigh no more than 100 lb. The patient sought for medical treatment on account of a painful throbbing lump in his abdomen. The pain, he said, was constant, but subject to irregular exacerbations. He stated that he had seen no lump, and felt no pain or throbbing till after his admission into gaol; but much importance cannot be attached to this assertion, as natives of his condition are usually wanting in exact observation, and, as a rule, are unwilling to make clear and consecutive statements about their ailments.

On examination, a smooth rounded swelling was seen a little below the inferior margin of the liver and rather to the right of the middle line. The swelling was somewhat of the same size and shape as the larger end of a hen's egg. It appeared to rise and fall with the pulse of the abdominal aorta. The skin covering it was unaltered and free. The percussion note was dull. Manipulation showed that the tumour was much larger than might have been supposed from mere inspection. It extended far to the right and considerably to the left of the middle line. Though it could not be entirely isolated, it could be freely grasped, and gave the sensation of forming a mass of sufficient size to fill the hand with the fingers moderately extended. It allowed of little or no motion in the axis of the body, but it could be moved with ease from side to side. It had the feeling of being firm, smooth, and widely lobed. Though it rose and fell so regularly with the movements of the aorta, it was altogether free from any eccentric expansion. Five days before the patient's death it became smaller, firmer, and less movable. The inferior margin of hepatic dulness was normal and demarcated from the tumour by a well-defined space that gave a tympanitic note on percussion. The only other abnormalities that could be seen were a general atheromatous condition of the visible arteries and a hydrocele of the right tunica vaginalis. There was no cardiac or local murmur, no difference in any of the pulses, no œdema or paralysis of the lower extremities. The patient's strength rapidly sank after his admission into hospital, and at the time of his death he was in a state of great emaciation. There seemed to be no other cause for this rapid loss of strength but the local one, as the patient was in other respects free from any marked complication till shortly before death, when subacute dysentery supervened.

On post-mortem examination the tumour was found to be an aneurism of the abdominal aorta situated below the cœliac axis and embraced by the head of the pancreas. The sac was adherent to the surrounding organs and tissues, in some parts so loosely that the handle of the scalpel was sufficient to break down the attachments, in others so firm that a more or less careful dissection through the tissue of new formation was required to separate the tumour. The small intestine was the only structure that showed signs of having suffered from pressure. At one spot, though not adherent, it had become semi-gangrenous, and at another it was so firmly attached to the aneurism that it could not be set free without injury, and the central portion of the implicated intestinal wall was discoloured, softened, and almost eroded. The aneurism started from the anterior aspect of the aorta and the spine was not interfered with. As the tumour was adherent to parts that naturally allow of a considerable amount of play, its own free movement was not difficult to understand. The neighbouring arteries were unusually patent. The wall of the left ventricle of the heart was markedly thickened. The valves were normal. The arch of the aorta was atheromatous, but presented no calcareous plates. The pleuræ of both lungs showed old adhesions. The liver was much congested. The large intestine was affected with severe and generalised dysenteric inflammation and ulceration. When the aneurism was removed from the body its contour was found to correspond with the idea formed of it during life. It measured 4½ in. in length, 2¾ in. in breadth, and 2¾ in. from before backwards. When cut into it was seen to be filled with stratified blood-clot of the consistence of the parenchyma of a healthy liver. The mouth of the sac measured 2¾ in. in length and 1 in. in breadth. The clot in this situation was paler and firmer than that within the body of the sac. It sank slightly below the level of the unaltered arterial coats, thus increasing to a small extent the lumen of the aorta at this point. Its exposed surface was sufficiently smooth to interfere but little with the blood-current. Throughout the greater portion of the wall of the aneurism the arterial coats could be traced, but at points considerable thinning had taken place, and the parietes were reduced to a single yielding layer of connective tissue.

Perhaps the above case may be of interest from the fact that it presented some of the points that usually indicate that a tumour is not an aneurism, and that it appeared just to have missed a spontaneous cure. Possibly, too, it is worth remembering that the tumour could not be moved in the axis of the aorta. It may be added that at the beginning of the post-mortem examination a small incision was made through the abdominal parietes and the hand carefully inserted, with the object of ascertaining if any remedial measures might have been taken during life, but so far from this exploration throwing any additional light on the nature of the case, the true condition of things was not fully made out till the tumour was exposed and removed. The aneurism and the adherent parts, though movable *en masse*, had become so matted together that diagnosis without dissection was impossible.

ON A CASE OF RAPID LITHOTRITY.

BY THOMAS WRIGHT,
SENIOR SURGEON, GENERAL HOSPITAL, NOTTINGHAM.

MR. G. H——, aged forty-six, farmer, applied to me in the latter part of last year with symptoms of stone, having suffered from similar symptoms for more than a year previously. On examination by a sound a calculus was detected which was believed to be suitable for removal by this method, all other conditions being favourable with the exception of a small meatus.

Nov. 13th.—The patient having been prepared, chloroform was first given and ether substituted after unconsciousness had been arrived at. Placed upon his back with his knees raised, the orifice of the urethra was slit up, and the ordinary lithotrite introduced. Crushing the calculus prior to the withdrawal of this instrument had been considerably accomplished, its size being declared when first seized to be above the average, the breaking giving evidence of its hardness. By a tube (No. 14½) a large quantity of débris was removed. Four more crushings were effected with the scoop-lithotrite, each crushing being followed by the introduction of the same tube for the extraction of pieces. At the end of forty-five minutes the bladder was found to contain nothing tangible. No blood was withdrawn, nor was the water tinged during the operation. Weight of calculus 112 grains; lithic acid. In the evening the temperature was 98·8°. No tenderness or pain complained of beyond soreness in the urethra.—14th: Temperature 98·6°. Passed water seven or eight times in twenty-four hours; total quantity two pints. Vomited once from anæsthetic. Evening: Temperature 100·2°. Urine was passed more frequently, and the urine had an unpleasant odour, besides being slightly tinged with blood. No pieces had been seen.—15th: Urine less odorous, and free from blood. Passed two pints and a half of urine. Took food well, and general condition admirable. Soreness of urethra much less. Evening: Temperature 100·8°. Discomfort in bowels. Enema was ordered.—16th: Temperature 98·8°. Enema had acted well; urine passed much less frequently. In the evening the patient became very nervous and complained of pain in the left iliac fossa, which

was believed to be due to flatus. Temperature 100·2°.—18th: A normal temperature was recorded and a good night. Sat up for an hour. Evening: Temperature 100°. Urine slightly turbid on cooling. An enema ordered.—19th: Bowels acted naturally. Temperature normal. Complained of hæmorrhoids. From this date nothing material was noted, and the patient returned to his home on Nov. 25th.

Remarks.—In a highly nervous and sensitive man a stone of fair size was thus removed with ease, and followed by no discomfort nor untoward circumstance, showing clearly that in this method we have a means of affording relief to our patients much less dangerous to the sufferer than lithotomy, and more palatable to the friends.

CHILDBIRTHS IN GENERAL PRACTICE.

By CAREY COOMBS, M.D. LOND.

SOME time ago in a leading article in THE LANCET a regret was expressed that the statistics of childbirth were so difficult to obtain. I was reminded of this by an application from the Registrar-General's office for details of a death occurring in my practice which was connected with pregnancy, so I have summarised my cases, and have compared the numbers with the total births. A country practice is not bounded by an exact line, but I should have been called in to any difficult labour, or one that was likely to prove fatal, within a certain area, during the past ten years. The number of births in that period, in a population of 4900, has been 1350, or nearly, of which number 660 have been attended by me and my assistants. The number of deaths in childbed during the same period has been about eight. The causes of death in these cases have been as follows:—

CASE 1.—Mrs. S——, aged forty-six, a flabby woman, in her ninth confinement, was first seen by my assistant, but the presentation was so high up after several hours of labour that he sent for me. I found the child's face presenting, and turned with some difficulty, because the membranes had ruptured twenty-four hours before, and because the pelvis was narrow the extraction of the head was very troublesome. This patient died from phlebitis about five weeks later.

CASE 2.—Mrs. C——, aged about forty, with a rather narrow pelvis, was delivered naturally of a live child after three hours of very strong expulsive pains. Eight days afterwards she was seized with pain in the bowels and faintness, and died in an hour or two. There was no autopsy.

CASE 3.—Mrs. W——, aged thirty-seven, was attended by my assistant in her fourth confinement. The child was born easily, but the placenta was adherent, and very fragile, and he had much difficulty in removing it. This patient sank after four weeks of pelvic cellulitis.

CASE 4.—Mrs. M——, aged over forty; in her ninth pregnancy. She had hæmorrhage every month. At the sixth and seventh months the amount of discharge increased, and at the eighth month, when the hæmorrhage had been going on for thirty-six hours, I was asked to see her. The placenta was not so completely over the lower part of the uterus that I had to detach it in dilating the os. The turning presented no special difficulty, but the extraction of the head occupied much time. This patient did well for a few days, but died of septicæmia about fourteen days after her delivery.

CASE 5.—Mrs. B——, aged about thirty-six. This woman was feeble and anæmic, had had several miscarriages, and died in her third full-time confinement from hæmorrhage. Her attendant told me that she had a good labour; the flooding came on soon after he left the house, and was fatal within two hours of the delivery.

CASE 6.—Mrs. F. F——, aged forty-four, an imbecile and a drunkard; she had lived under unfavourable circumstances during her pregnancy, with little food and much beer. In the ninth month she had frequent discharges of blood; and when seen at 8 A.M., and subsequently by my assistant was very weak—there was no uterine effort. When I saw her, about 4 or 5 P.M., she was collapsed, but the discharge had ceased, the os was dilatable, the head and placenta presenting; there were no pains, and there was no pulse worth mentioning. We tried to make her rally by the use of external heat, frequent warm nourishment, the subcutaneous injection of ether, and transfusion, but I need hardly say that no attempt was made to deliver a woman in so low a condition. We remained with her till her death, at 11 P.M.

CASE 7.—Mrs. R——, aged twenty-five, was attended in her fourth labour by a midwife, who desired the husband to go for me as his wife was flooding. When I reached the house I found a fine young woman quite dead, with her uterus and the attached placenta lying in the bed.

CASE 8.—Mrs. P——, aged about thirty-two. As I sat in the room, attending her in her fifth confinement, I was annoyed by a decided smell of sewer-gas. As it appeared that a closet had been made in a corner of the room, in such a manner that the cesspool of the privy could send its gases into the room, my patient was removed as soon as possible, and the insanitary closet was stopped up. My patient had a good labour, but died twelve days after from septicæmia and meningitis.

In 1000 confinements there have been 13 cases of placental presentation, 20 infants have presented the breech, 12 the feet, and 13 the arm or shoulder. The last case of this kind was spontaneously evolved before I could see the patient. There were 7 cases of face presentation. In 2 instances there was mania. Three patients were convulsed, but none of them died. The long forceps were applied in 35 cases; short forceps in 52 cases; making a total of 87. In 21 cases version was required, and in seven cases the infant's head was opened. Two of these craniotomies were done in consultation, as were one or two of the versions; but the statistics generally apply to cases attended by myself or my assistants. I wish to call attention to the large number of placental presentations. Those occurring among farmers' wives appear to be due to the long periods, often many hours continuously, which they spend standing in the dairy. This laborious work is often continued throughout the pregnancy.

In conclusion, then, it appears that not half the childbirths are attended by a medical man, and the calculation of the percentage of deaths must be based upon the total number of deliveries; eight deaths in 1350 confinements are equivalent to one in 168¾. I find some difficulty in enumerating the cases of flooding, because this symptom is so hard to define; but if the hæmorrhagic cases, placental, accidental, and post-partum, were added to others in which manual interference was required, and to the cases requiring delivery by forceps or the perforator, the proportion of purely natural labours would seem small as compared with those occurring in the practice of some men who have published their statistics.

Castle Cary.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

WESTMINSTER HOSPITAL.

ULCERATIVE (? SEPTIC) ENDOCARDITIS SIMULATING ENTERIC FEVER; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. STURGES.)

FOR the following notes we are indebted to Mr. E. Carroll, clinical clerk.

Sarah E——, aged thirty-nine, was admitted on June 13th, 1882. She was married, and had had one living child and three miscarriages, the last two years and a half ago. She had been a healthy woman till two months before admission, had lived the greater part of her life in London, and of late had occupied herself in household work.

Two months before admission she began to feel ill, her appetite failed, she had pain in the chest and between the shoulders more or less constantly; she also had pains, which she described as "rheumatic," affecting first one limb and then another, and was under treatment for this. No more definite symptoms showed themselves until three days

before admission, when she took to her bed feeling "feverish," without diarrhœa, vomiting, or cough.

On admission the patient looked pale and ill. The tongue was rather tremulous, and covered, except at the edges, with dirty, yellow, moist fur. (The tongue remained in this condition all through the illness, and never became dry or brown.) Skin moist; pulse 96. Urine acid; no albumen; specific gravity 1015. Chest: Heart apparently normal in position and action; no bruit; breath-sounds natural. The abdomen was not tumid or tender; no gurgling; no enlargement of liver or spleen; no pain complained of; no dyspnœa; no diarrhœa. The patient complained principally of languor, want of appetite, and debility. The temperature on admission was 100°; next morning 103·6°. Liquid diet, milk and beef-tea.

June 15th: Left pupil larger than right; tongue still furred, slightly drier. Temperature last night 102·6°; pulse 108. Ordered five minims of dilute hydrochloric acid three times a day.—17th: Temperature for last two days has varied considerably—on the 15th, 99·2° to 102·4°; on the 16th, 101·4° to 104°; on the 17th, 97·6° to 102·4°.—20th: Bowels have been opened occasionally, once every other day, till to-day. To-day two motions, resembling enteric stools in appearance and smell; no tumefaction or tenderness of abdomen; highest temperature 101·8°.—21st: Temperature still high, 102·4°. Ordered two teaspoonfuls of brandy every three hours.—22nd: Temperature 101·2° to 103·4°; on the 23rd, 101·6° to 102·4°; on the 24th, 102·4° to 103·6°. The patient is in much the same condition; complains of numbness and aching pain in left foot and leg, principally in the calf. There is no visible change in tissue; foot very cold; hot fomentations. Ordered hot bottle to foot. Bowels opened on a average twice a day; motions as before; lips very pale. Ordered two teaspoonfuls of brandy every second hour.—26th: Temperature has varied from 98·8° to 104·2°. Some slight pain in abdomen; no tenderness; tongue the same; diarrhœa continues; two motions a day.—27th: No pain in leg; stiffness.—Temperature on the 28th, 99·8° to 101·2°; on the 29th, 99·4° to 102·6°; on the 30th, 101·4° to 102·6°.

July 3rd: The condition of the patient much the same. Ordered one grain and a half of sulphate of quinia, eight minims of dilute hydrochloric acid, in water, three times a day. Brandy continued.—5th: Condition still unsatisfactory. Heart and lungs examined; nothing abnormal found. Slight cough; bowels the same; tongue still furred and moist. Temperature 100° to 103°; pulse 116.—8th: The quinine mixture increased to two grains; brandy continued. Pulse more rapid and feeble; tongue still furred, moist, and tremulous. The heart-sounds normal; a few rhonchi over left chest, in front. Brandy omitted. Temperature 99·2° to 103·6°.—19th: The patient had well-marked rigor early this morning, lasting forty minutes; condition appears critical. Respiration rapid and shallow, 40; skin cold and clammy; lips pale. Very feeble, complains of nothing definitely, quite sensible; no bruit heard; no dulness over chest; a few rhonchi at bases; pulse 150. Ordered six ounces of brandy in twenty-four hours.—10th: The patient has gradually sunk into a great collapse; legs drawn up; no distension or tenderness of abdomen. Temperatures 98°, 97°, 96·4°, and 95·8°. Almost pulseless at wrist; lips very livid; face much cyanosed; cold clammy sweats, occasionally delirium. Champagne ordered; was sick after three doses; brandy, hot bottles.—11th: The patient died at 2.30 this morning, in a state of great collapse. Last temperature taken, 95°.

Necropsy.—Body well nourished; rigor mortis persistent. Brain, pleuræ, lungs, and pericardium normal. All the cavities of the heart were distended with decolorised fibrinous clot; the muscular tissue was pale, and that of the right side much paler than that of the left. The wall of the right ventricle was very thin, in some places not exceeding $\frac{1}{16}$ in.; there was over the apex a thickish layer of subpericardial fat. The aortic valves were the seat of ulcerative inflammation, which in places exhibited perforation. Connected with the same valves were large vegetations. One valve was divided by the ulcerative process as far as its base, while from a second an oval mass of old fibrinous clot, about an inch in length, depended from a thin pedicle; this valve also had a small perforation about its centre. On the remaining valve was a conical vegetation about the size of a small pea. All the vegetations were on the ventricular aspect of the valves. Spleen and intestines normal. Careful search was made for emboli, but none were discoverable in any part of the body.

Remarks by Dr. STURGES.—The above case is of interest as a contribution to the clinical history of an affection which is at present classified under two headings: the typhoid and the pyæmic. It is a striking illustration of the former. Not only were the symptoms of enteric fever very closely imitated, but there were circumstances of the patient's history referring to defective drainage in the house whence she came which pointed in the same direction. It will be seen that after remaining for three weeks in the condition described with no very threatening symptoms the patient, on what was reckoned the thirtieth day of the fever, had a severe rigor, after which she became collapsed, and rapidly sank. It was thus only a few hours before death that any symptom occurred to bring the case within the definition of septic fever. With such an ending, however, had the physical signs lent their aid we might have had the satisfaction of arriving at a correct diagnosis during life; but it so happened that auscultation gave no assistance. Owing to the ambiguous character of the earlier and of the latest symptoms, the chest was carefully examined both when the patient first came under notice and when she was about to die. It may be stated positively, therefore, that the cardiac sounds were clear and without murmur. How it happened that such lesions as were found post mortem failed to announce themselves in life need not here be discussed. It is of interest to observe how the accidental absence of cardiac murmur may leave us without the means of discriminating ulcerative endocarditis from enteric fever, a disease which already has a good deal credited to it, and which we are perhaps too apt to appropriate upon insufficient warrant. Those interested in the pathology of ulcerative endocarditis may profitably peruse Dr. Coupland's cases, published in the *Medical Times and Gazette* of this year, as well as a clinical lecture by Dr. Wilks, in the *British Medical Journal*, Jan. 14th, 1882.

GOCULDAS TEJPAL HOSPITAL, BOMBAY.

CASES OF ELEPHANTIASIS OF SCROTUM.

(Under the care of Surgeon-Major T. CODY.)

THE following cases conclude the report commenced in the "Mirror" on July 29th, and continued last week.

CASE 4. *Elephantiasis of Scrotum; Removal by Operation; Recovery.*—A Mussulman priest, aged forty-two, had a tumour involving both penis and scrotum, a growth of about ten years. In operating on this case there was some trouble in freeing the penis from the diseased structures, as there were little patches of healthy integument on both sides of it, which had to be preserved. The diseased structures on the scrotum went very high up, so that there was some difficulty in fixing the testes, both of which were found healthy and preserved, in their position. This case was operated on under the antiseptic spray, and the dressing used was a layer of carded oakum well saturated in the spray, and covered by four layers of antiseptic gauze, two of saturated gutta-percha tissue, and all applied under the spray and covered over with a piece of oiled cloth.

On the fifth day after the operation there was an erysipelatous blush over the right pubic and pelvic regions, which was painted over with a solution of the perchloride of iron. The erysipelatous redness shifted down the right thigh and leg and eventually extended to the left side and the back, lasting altogether for about five or six days, and producing little or no constitutional disturbance. Wherever it appeared it was painted with solution of the perchloride of iron, thirty drops of which were also given internally three times a day after food. After the fifth or sixth day the erysipelas disappeared altogether, and the wound progressed without a further bad symptom. When the discharge ceased the granulating surface was dressed with boracic acid ointment, under which the healing process progressed most favourably. This man was altogether about six weeks in hospital. The tumour weighed six pounds.

CASE 5. *Elephantiasis of Scrotum; Removal; Recovery.*—An old Hindoo, aged sixty-two a carpenter, was admitted with a tumour involving the integument on the under surface of the penis (that on the dorsum being quite healthy) and the entire scrotum. It was a growth of over twelve years, and when removed weighed above eleven pounds. The left testicle was found diseased and excised, but the right being healthy was preserved. He was an excellent patient,

being perfectly indifferent to himself and his disease, and regarding what was done for him in a most philosophic manner. The result was he made an excellent recovery, and left the hospital about two months after the operation, with the wounds all healed.

ELEPHANTIASIS OF THE LABIA VULVI; REMOVAL; RECOVERY.

A Hindoo woman, aged thirty years, presented a most unsightly elephantoid tumour in the left labium, which extended downwards into the perineum. In the right labium there was a smaller tumour, about the size of an orange and unconnected with the first. The incision to remove the tumour on the left side extended from the mons Veneris to the end of the perineum, and was carried on the inner side through the mucous membrane on the inner surface of the labium. The incision on the outer side extended to the left groin and margin of the thigh; and when the mass, which weighed about five pounds, was removed, a most unsightly gaping wound was left. There was very little hæmorrhage, and slight torsion was found sufficient to arrest that in the three small vessels severed. The smaller tumour on the right was now removed, and the edges of the wound were brought together without any trouble. To effect healing of the first wound the legs had to be brought together and the thighs tied firmly by a broad bandage. Three or four wire sutures were put in by which the mucous membrane of the vagina and the outer integument were connected. This position, however, was more relied on to assist the healing process than anything else, and she was so kept, with the legs tied together, for over three weeks. It was most remarkable how the parts began to assume their natural shape as the healing process went on. The surface had altogether healed over five weeks after the operation, when the patient was removed by her husband.

Reviews and Notices of Books.

Foods, their Composition and Analysis. A Manual for the use of Analytical Chemists and others, with an Introductory Essay on the History of Adulteration. By ALEXANDER WYNTER BLYTH, M.R.C.S., F.C.S., &c., Public Analyst for the County of Devon, and Medical Officer of Health and Public Analyst for St. Marylebone. London: Charles Griffin and Co. 1882.

ALTHOUGH this work is intended primarily for the use of analytical chemists, it contains much that will prove of value and interest to those engaged in the practice of medicine. The historical introduction is evidently the result of considerable labour and research, and it is amusing to find that the practice of sophistication was not unfamiliar to the Greek and Roman traders. In fact the adulteration of wine in ancient Athens was practised to such an extent that a special inspector was appointed to investigate the matter. In our own country, in the latter part of the twelfth century, "false weights, false measures, false pretences of all kinds were the instruments of commerce most generally in use; no buyer would trust the word of a seller, and there was hardly any class in which a man might not with reason suspect that his neighbour intended to rob him." The author's account includes a history of adulteration as practised from very early times by bakers, brewers, vintners, druggists, and others, and he also refers at some length to the history of the crime as practised in France, Germany, and other countries. The chapter on the Duty of the Inspector or Purchaser under the Adulteration Act is thoroughly sound and practical, and will be read with much interest. The advice given to inspectors is not only sound but judicious. "The official purchaser," says the author, "should not select, to the exclusion of others, the poorest shops, but take samples as equally as possible." He points out that the purchase need not be effected in an officious manner, and that it is not fair, for example, to enter a shop full of people and with ostentation buy and divide the sample before the customers.

The subject of the adulteration of bread with alum is of considerable interest to medical men. This substance is added to bad or slightly damaged flour both by the miller and baker. Its action, according to Liebig, is to render insoluble gluten which has been made soluble by the acetic or lactic acid developed in damp flour, and hence it arrests the undue conversion of starch into dextrine or sugar. The author considers that the influence of alum on health in the small quantities in which it is usually added to bread is very problematical, and that it rests upon theory more than observation. We are not prepared to say that this view is not correct, but it is certainly opposed to the observations of some recent writers on therapeutics—Phillips, for example, who says that he has often traced indigestion to alum in bread. In testing for alum the crust and crumb should be analysed separately, for many bakers use for the latter only a flour technically called "cones," which is strongly alumed.

The chapters and articles on Milk, Cream, Butter, and Cheese are written in a workmanlike manner, and are deserving of attentive perusal. A full account is given not only of cow's milk but of human milk, and of the milk of the goat, mare, ass, camel, hippopotamus, and other animals. A very interesting description is given of the milk-like secretions of birds and plants. It is by no means certain that mammals alone secrete milk, for pigeons after the young birds are hatched secrete in their crops a nutritious albuminous fluid which is used for feeding the offspring. In the vegetable kingdom many plants and trees yield a white fatty secretion popularly known as milk, but these fluids as a rule have no right to the title, being totally different both in composition and properties. Curiously enough, however, a true "milk tree" (Brosimum galactrodendron) is found in Central America. On incising the trunk it yields an abundance of a thickish feebly acid fluid which coagulates on exposure to the air. This juice has been recently analysed by M. Boussingault, who finds that it is analogous to ordinary milk, containing an albuminous principle, a fatty principle, and sugar and phosphates. Koumiss is now so largely used in the treatment of wasting diseases that we turn to the author's account with much interest. He gives several analyses, and describes its mode of preparation by the Tartars from the milk of the mare and camel. A substitute for koumiss may be readily prepared from cow's milk, even by those who have had but little experience in such matters, and detailed information on this point would have been welcome. The custom of washing cheeses with a solution of arsenic to prevent the attacks of the fly is deserving of notice, and might serve to throw light on some obscure case of disease.

The chapters on Tea, Coffee, Cocoa, Chocolate, and Maté are full of interesting and valuable information. The different kinds of wine, beer, and spirits come in for their share of attention, arrack even not being omitted. In addition to the points we have briefly indicated, there are articles on various condiments, such as mustard, pepper, and Cayenne. It may be of interest to the rising generation to learn that sweets are much less frequently adulterated than is commonly supposed. A large proportion of the common sweets contain nothing but sugar, for the manufacturer, by careful heating and manipulation, is able to impart a quite surprising scale of colours, from the purest white to fawn-colour, straw-colour, reddish-brown, brown, and even black, by this agent alone.

The sections on Water Analysis are eminently practical, and, like the rest of the work, are fully illustrated. We have given the barest possible outline of the contents of this volume. It is thoroughly practical, and should be in the hands of every medical practitioner not fully acquainted with the subjects of which it treats.

An Index of Comparative Therapeutics, with Tables of Differential Diagnosis, a Pronouncing Dose-list on the Genitive Case and Memoranda concerning Clinical Thermometry, Incompatibility of Medicines, Ethics, Obstetrics, Poisons, Anæsthetics, Fees, Asphyxia, Urinary Examinations, Pharmacology, Nomenclature, &c. By SAMUEL D. L. POTTER, A.M., M.D., President of the Milwaukee Academy of Medicine, Author of "The Logical Basis of the High Potency Question," and many other essays in defence of the Milwaukee Test. Second Edition. Chicago: Gross and Delbridge. 1882.

THIS is a most amusing work, but it has been much more carefully compiled than would be supposed from a cursory inspection. The author has attempted a kind of index of treatment, a comparative review of the different modes of care recommended by the leading authorities on therapeutics. A compilation of this description involves a great deal of tiresome and tedious work, and we should be none the less grateful to the author because on many points of nomenclature, and even treatment, his views will be found opposed to the majority of readers in this country. In the index he says: "The critical reader will, no doubt, notice under any given title the omission of some favourite remedy, and the insertion of others which to him seem less important. The compiler has been compelled to use his own judgment in regard to this, and cannot expect that the result will please all." Nothing could be fairer, and we are bound to say that the author's selection has been made with care and discretion. There are in reality very few omissions. Take, for example, the case of asthma; here, amongst other modes of treatment, directions are given for the use of iodide of potassium, opium, arsenic, belladonna, lobelia, cannabis indica, coffee, ipecacuanha, stramonium, and datura tatula, Grindelia robusta, nitre papers, chloroform, ether, nitrite of amyl, sulphurous acid, antimony, chloral, bromide of potassium, and eucalyptus. Under the head of prophylactic treatment reference is made to the necessity for avoiding the exciting causes of a paroxysm, such, for example, as indigestible food, wet feet, sudden changes in temperature, constipation, and so on. The author mentions incidentally the application of the constant current over the pneumogastric nerve. This one example, taken quite at random, will show that the work has been well and carefully done. The author apologises for the omission of all reference to certain works on materia medica and therapeutics, pointing out that the nature of the plan adopted by him precludes reference to those "who deny disease-entity or omit pathological and physiological indications for drug usage." The chapters on Ethics and Fees are of interest, although they have no special reference to practice as pursued in this country. It would have been more in accordance with our notion of the general fitness of things had these articles been relegated to a special section, and not mixed up with questions of treatment. It is rather an abrupt change from ethics to excrement, and from "feces" to fees. The alphabetical arrangement is convenient, but has its disadvantages. On the whole the work is a good one, and will be found useful for reference.

Nitro-Glycerine in Angina Pectoris. By WILLIAM MURRELL, M.D., M.R.C.P. London: H. K. Lewis. 1882.

THE profession are much indebted to the author of this *brochure* for having introduced to their notice the important power possessed by nitro-glycerine in controlling the attacks of that most painful, alarming, and fateful condition known as angina pectoris. Whatever light subsequent research may throw upon the nature of this condition, and however much its therapeutics may thereby be modified, physicians will always be ready to acknowledge the value of the two drugs, allied in composition and in physiological action—nitrite of amyl and nitro-glycerine,—and of the two the latter certainly possesses considerable advantages over the former; for although, as Dr. Murrell abundantly proves, the action of nitro-glycerine varies in a most remarkable degree with individual idiosyncrasy, a fact that led to much conflict of testimony many years ago, it has the merits of being more stable, of being slower in producing its effects, and producing them more permanently than does inhalation of the nitrite of amyl. This is clearly shown by the author, who has been enabled to compare not only the effects of the two drugs upon the circulation, but the very striking influence produced by nitro-glycerine in increasing the flow of urine. For this latter purpose he made observations upon the amount of urine excreted at short intervals after administration of nitro-glycerine to an epispadiac, and the results are both striking and interesting. The little book contains full details of several cases treated by the author, and its perusal should go far to encourage practitioners to employ the remedy in full confidence of an alleviation, and in some instances of cure, of anginal seizures.

THE BRITISH MEDICAL ASSOCIATION.

FIFTIETH ANNUAL MEETING,

Held at Worcester, August, 1882.

THE third general meeting took place on Thursday morning, the 10th inst., and commenced with the reading of the Report of the Medical Reform Committee by Dr. Ed Waters, of Chester. The report referred chiefly to the recent Royal Commission on the Medical Acts, which was stated to mark a distinctive era in the history of medical reform. It was held that the Commission had conceded all that the Association had for years contended, and the aid of the Branch Councils of the Association was sought to memorialise the Privy Council and petition Parliament to bring in a Bill founded upon the report of the Royal Commission. The report was adopted, and a vote of thanks to Dr. Waters and the Committee was passed unanimously, on the motion of Mr. H. P. Symonds, seconded by Mr. Coates.

Dr. A. CARPENTER read the report of the Committee appointed to obtain restrictive legislation for habitual drunkards. It announced the approaching opening of the Dalrymple Home for Inebriates in a healthy suburb of London, and the steps to be taken to place it under the provisions of the Habitual Drunkards Act, 1879. The Committee have also issued circulars to boards of guardians, asking for an expression of opinion on the propriety of guardians having the power to detain drunkards in workhouses for the purpose of recovering from the effects of their excesses. Favourable replies had been received, and the Committee urged the members of the Association to use their influence with boards of guardians. Dr. Drysdale seconded the motion, which was supported by Dr. Gray, who expressed the opinion that the certificate might be signed by one instead of two justices.

Mr. STOKES (Dublin) then delivered the Address in Surgery. He said that the Association, as it had its birth in the "Faithful City," so it had proved faithful in many good and noble ways—faithful in removing professional jealousies and softening asperities—faithful in protecting with its broad and strong shield those who had been cruelly and unjustly attacked—faithful in its efforts to raise the social status of the profession—faithful in its attempts to extricate public opinion from the quagmires of sentimentalism and folly—faithful in aiding and encouraging the scientific vanguard of the profession. The list of advances in surgery during the last half century was a goodly one. Among these were the abandonment of an indiscriminate bloodletting in almost every form of acute disease, of a reckless use of mercury in the treatment of certain diseases, and of setons and moxæ in hopelessly irremediable articular and other diseases. Having enumerated

a goodly list of the modern improvements in surgical treatment, he singled out as topics which far surpassed in importance all others—the three "giant strides that the past half century has witnessed,"—namely, the discovery and application of anæsthetics, the restoration of diseased or injured bones and joints necessitating resection, and "the enunciation of the principle and establishment of the practice by Pasteur and Lister of antisepticism in the treatment of wounds." Such advances may well make us feel a pardonable pride in British surgery, and give confidence in the coming triumphs of our art. As to anæsthetics, he adverted to the peril which must necessarily attend their administration, and the need for caution and the adoption of such a rule as that formulated by Mr. Hutchinson in reference to the use of chloroform in cases below six and above sixty years of age. He expressed a personal preference for ether, as economising time, as being safer, and, as a rule, being followed by less sickness and a slower return to sensibility. The best methods for administering it were those in which the air is rebreathed by the patient, and experience had not confirmed the *à priori* belief that this admixture of ether vapour and carbonic acid gas introduced an additional element of danger. After briefly enumerating the advantages of anæsthetics, and referring to Morton's priority in their application to surgical practice, he passed to the subject of antiseptic surgery, in support of which he spoke in terms of considerable force and eloquence. Naturally he referred to the address delivered by Mr. Savory at the Association meeting at Cork in 1879, where the subject had been adversely handled, and declared that when "the address is stripped of all its brilliant eloquence and rhetorical decoration" it reveals the admission of the germ theory of putrefaction, and the fact that the method of dressing employed by Mr. Savory is essentially antiseptic. Mr. Lister's recent utterances upon the value of the carbolic spray had been much misunderstood; for he did not abandon the antiseptic principles, but looked forward to obtaining more perfect means than the carbolic spray afforded. The various views of the nature of inflammation propounded by Burdon Sanderson, Ogston, and Hueter, as to whether the infective properties of inflammatory products are or are not primarily dependent on the contact of atmospheric organisms, were shown to be equally consonant with the prophylactic principle of antiseptic surgery. The weak point of the "persistent and obstinate opposition" to Listerism is the general admission of the truth of the germ theory of putrefaction; whilst Mr. Lawson Tait's "dead tissue factor" was regarded as a superfluity. "Those who advocate and practise what they are pleased to term a 'modified' antiseptic system, attempt, in fact, in a roundabout, clumsy, inefficient way, to do precisely what those who practise Listerism achieve by means which are the outcome of accurate scientific research. The aim in both cases is to neutralise or destroy the agencies which predispose to and produce the *materies septica*; in the one instance by numerous uncertain and often inefficient methods, and in the other by the unerring artillery of chemical agency." Mr. Stokes disposed of the taunt that Listerism lacked originality by mentioning what he had himself seen of Maisonneuve's practice. He considered that ovariotomy was not the best test of the efficacy of the method; one of the best tests of its value is resection of the knee-joint; and he illustrated this from his own experience. He also related other remarkable instances of "antiseptic triumphs," and asked whether such results could have been obtained previous to Listerian teachings. There could be but one reply—Impossible. As to its hygienic effects, he mentioned the change that had been wrought in the hospital to which he is attached in the prevalence of erysipelas, pyæmia, and hospital gangrene—when its present condition was contrasted with that which prevailed during his studentship, an experience which had been so widely repeated abroad. Mr. Stokes then defended Professor Lister and his followers for not having more recourse to statistics in demonstrating the superiority of antiseptic methods, and asked why Mr. Savory made no mention of ovariotomy when he gave the statistics of operations at St. Bartholomew's Hospital. Without himself regarding statistics with the reverential awe of some, he mentioned that at the Richmond Surgical Hospital in 600 operations performed by himself and colleagues during the past three years, the mortality was 3·6 per cent.; "and there was not a single case in which Listerism was accurately employed that was followed by any infectious disease." He enumerated some of the directions in which owing to antiseptics the field of surgery had been widened, severely commented on the line taken by those who wilfully refuse to acknowledge its benefits, and concluded his remarks on this head as follows: "In the interests and for the credit of British surgery it is time so unrighteous a warfare should cease. It is time that the irritating dust of an unreasoning prejudice should be swept away. It is time that one of the greatest discoveries and boons to surgery this century has produced should be universally recognised as such. It is time that its discoverer and exponent should be acknowledged as one of whom it may well be said—

> 'With genius Nature joins in everlasting covenant still,
> The promises of one, the other fails not to fulfil.'"

In the third part of his address Mr. Stokes dealt with the method adopted for bringing about a regeneration of bones and joints, in cases of disease or injury necessitating resection, with which the names of Syme, Langenbeck, and Ollier must for ever be associated. He described the conditions under which once operations were most successful, and referred to the great advance made by the introduction of bone-transplantation by Dr. McEwen of Glasgow. Then, speaking more particularly of bone-resection, he urged its performance before any profound organic changes take place. A reference to amputation, and especially to the single flap operation of the late Mr. Carden of Worcester, closed this survey of surgery, and the rest of the address was occupied by an eloquent vindication of experimental research, and a protest against the increasing agitation that is now maintained in opposition to it. He concluded:—"I have mentioned many achievements in surgery the past half century has witnessed. Fifty years hence this great Association will, I hope, again meet here to celebrate its centenary; and my successor will, I trust, with greater ability and eloquence than I can command, tell of as great or greater triumphs than I have done. To enable him to do so we can all aid, some powerfully, others feebly; but still every unit in this great brotherhood can assist; and it should be our ambition as well as our prayer, that when the hour arrives for us to cease from our work, we may all feel, on looking back on our lives, that we have done something to that end. Something—be it great or small—in the interests of our common humanity, in the interests of our loved country, and of a pure devotion to truth, to render the science to which we have devoted our lives nobler and fairer than before."

On the motion of Mr. TEALE, seconded by Sir W. MACCORMAC, a cordial vote of thanks was passed to Mr. Stokes for his address.

The Stewart prize of 50 guineas was then presented by the President to Dr. Vandyke Carter, of Bombay, for his researches on Spirillum Fever. The prize was received by Surgeon-General Walker on behalf of Dr. Carter.

The annual dinner of the Association took place on Thursday evening in the Guildhall, the President, Dr. Strange, being supported by the Bishop and the Dean of Worcester, Sir Jas. Paget, Sir Richard Temple, Sir E. A. H Lechmere, M.P., Mr. Geo. Hastings, M.P., the Mayor of Worcester (Col. Stallard), and many others, to the number of more than 200.

The concluding general meeting was held on Friday morning, when there was a considerable attendance, in anticipation of a vote being taken with regard to the compulsory notification of infectious disease. An animated debate had taken place the day before in the Public Medicine section, and a pamphlet impugning the action of the Parliamentary Bills Committee had been widely circulated.

Dr. CARTER, of Liverpool, introduced a discussion on the Compulsory Notification of Infectious Disease. The Public Health Act of 1872 was wise in principle, regarding the medical man as the medical officer of health of every family he attended. After the passing of the Act a desire arose for notification, putting compulsion and fine upon medical men unless they notified to the sanitary authority every case of infectious disease. This rested on the assumption that medical men did not care to limit the spread of infectious disease. He was in favour of notification in the abstract, but not of compulsion. Compulsory notification had done no good, and provoked an antagonism between two branches of the medical service, which tended to check the steady onward progress which had been made under the Public Health Act. A quarter of a million of lives had been saved by the operation of the Act. Were they to introduce a new principle, which had been proved to fail, because medical officers of health wanted it? In order to test the opinion of the

Association, he proposed that a plebiscite be issued, asking whether the members of the Association did or did not agree to the principle of compulsion.

Dr. WHITTLE, of Liverpool, seconded the resolution.

Dr. LITTLEJOHN entirely objected to a plebiscite. The experiment of notification had been tried for four years in Edinburgh. The form of intimation adopted there would do much to disarm opposition. At the bottom were the words, "No immediate attention is required." If the word "no" was erased, it was understood that the case required immediate attention. The medical man in charge was made master of the situation. The public were satisfied that the clause was necessary to health, and the clause was a most undoubted success. Dr. Littlejohn concluded by moving an amendment, that the meeting declined to withdraw from the position which the Association had repeatedly taken in urging Parliament to make the notification of infectious disease generally compulsory.

Mr. DAVID EVERETT, who seconded the amendment, said that medical men were the only persons who could notify infectious disease, because they were the only persons who could diagnose it. He would safeguard the Act in every possible way, so as not to affect the liberty of the medical man in attendance.

Dr. A. CARPENTER could not agree either to the resolution or amendment, and asked whether medical men could not perform a duty without hanging round their necks penal clauses? The penalty should be put upon the householder, and the Act placed on the same footing as the Contagious Diseases (Animals) Act in this particular.

Mr. G. W. HASTINGS, M.P., said that, having introduced the Bill for the Notification of Disease, he might be allowed to say a few words upon it. His desire was that the Bill should be sent to a Select Committee. The medical profession would then have had ample opportunity of laying the whole case before the Select Committee. If the subject were not taken up by the President of the Local Government Board, he should reintroduce the Bill at the beginning of next session, in order that it might be sent to a Select Committee. Bolton was the only borough that petitioned against the Bill. Thirty-one cities and towns had voluntarily adopted the Act. No representation had been made by any town where the system was in force that it should be abolished. No objection could be made to the dual system. If the householder would not send in a certificate, the medical man would have a right to say to the householder, "If you don't, I will."

Dr. FITZPATRICK made a strong speech against the amendment, and protested against the introduction of Government compulsion and penal clauses hampering medical men in the performance of their duties. The death certificate, he contended, was not compulsory, and it was contrary to the spirit of the profession that such a system should be introduced.

A division was then taken by show of hands, the meeting having become very excited and tumultuous. The President declared the amendment carried, and was about to put it again as a substantive motion, and many members were leaving the hall, when Dr. Mahomed (London) claimed a hearing. He declared that the amendment which had just been carried embodied no statement that the objectional clause would be removed, and that whilst all were of opinion that compulsory notification was desirable, yet few held that the medical man should have the onus of it. He therefore moved a further amendment, in the sense of Dr. Carpenter's remarks, "That this meeting earnestly desires the compulsory notification of infectious disease, but wishes to express an opinion that the compulsion to notify should be placed upon the householder, in his duty as a citizen, and not upon the doctor." Mr. Husband seconded the amendment, which was carried by a large majority, and then adopted as a substantive resolution.

The Middlemore prize of sixty guineas was presented by the President, on behalf of the Association, to Mr. W. Adams Frost, F.R.C.S., for researches in ophthalmic surgery.

Professor HUMPHRY moved the adoption of the report of the Collective Investigation Committee, which referred to the appointment of Dr. Mahomed as secretary, and the work already taken in hand largely through his personal efforts. Three inquiries are at present on foot—viz., acute pneumonia, chorea, and acute rheumatism,—and the Branch Committee were invited to propose subjects for local investigation. A large number of branches were already engaged in the work. Mr. Dixon seconded the motion, and the report was adopted, the committee being reappointed.

Mr. E. HART moved the adoption of the report of the Parliamentary Bills Committee, which dealt with the subjects of the medical officers of the militia service, the regulation of midwives by examination and registration, the notification of contagious diseases, and the withdrawal by the Chancellor of the Exchequer of his proposed tax on carriages. The motion was seconded by Mr. Leighton Jones and carried.

Dr. WADE proposed that the report of the Scientific Grants Committee be adopted, and that a grant of £300 be made for its purposes. The researches in progress, many of which were approaching completion, include one on Anæsthetics, by Dr. McKendrick; on the Functions of the Kidney, by Dr. Newman; on the Relation of Organisms of Septic Disease, by Mr. Stanley Boyd; on the Pathology of the Heart, by Dr. C. S. Roy; on Methods for showing the presence of Bacteria in Epidemic Structures, by Dr. Thin; on the Variation and Duration of the Cardiac Ventricular Systole in Man under different conditions of Rapidity, Temperature, &c., by Dr. Chapman; on the Intimate Nature of the Contagious and Acute Infective Diseases, by Dr. G. F. Dowdeswell; on the Elimination of Nitrogen, by Mr. North; on the Pathological Histology of the Bloodvessels, by Dr. Heneage Gibbes; on the Electro-physiology of the Human Nerves, by Mr. A. De Watteville and Dr. Waller; and on the Relation between Bacteria and Surgical Disease, by Dr. Ogston. Dr. Chadwick seconded the motion, which was carried.

Dr. KEELEY proposed that the warm thanks of the members be given to the Mayor and Corporation for granting the use of the Guildhall and Music-hall.

Dr. HARRISON seconded the motion, which was adopted.

Votes of thanks were also given to the county magistrates for the use of the Shire Hall, to the Dean and Chapter of Worcester, the Philharmonic Society of Worcester, and the members of choirs of Worcester, Gloucester, and Hereford, to Mr. Done, to Earl Beauchamp for his invitation to the garden party, and to Dr. Strange and Mr. Hastings for the invitation to the *soirée*.

Mr. E. HART proposed, in the name of the 800 members who had attended the meeting, a vote of thanks to the President, for the preparations he had made in anticipation of the meeting, his hospitality, and his able address. Never had a president performed his duties with more efficiency and urbanity.

Dr. STEWART, in seconding the motion, said that Dr. Strange was one of the highest authorities on sanitary science, and referred to a paper written by Dr. Strange on the subject thirty years ago.

A vote of thanks was then given to the Hon. Local Committee, and the proceedings terminated.

On this day a large number of members availed themselves of an invitation to visit Droitwich and its brine baths. They were there entertained at luncheon, and the little town was adorned with bunting and banners in honour of the occasion. In the afternoon a large gathering of ladies and gentlemen assembled at the beautiful seat of Earl and Countess Beauchamp, Madresfield Court, Great Malvern, where a garden party was given by the noble owners, who received their guests as they entered the grounds. In the evening a musical *soirée* was given by the President of the Association and Mr. George Hastings, M.P., in the Shire Hall, to the members of the Association and their friends.

Saturday was devoted to excursions, which were well planned, and successfully carried out, the beautiful weather adding greatly to the success of these expeditions. One party visited the Malvern hills, where the geological structure of the hills and surrounding country was explained by the Rev. W. S. Symonds, F.G.S., and G. N. Piper, Esq. Another party proceeded by rail to Ross, and thence by the Wye to Monmouth, or by rail to the same place, Tintern, and Chepstow. A third excursion was to Stratford-on-Avon, and thence to Leamington, where one hundred members were entertained at luncheon by the local members; from Leamington by carriage to Kenilworth, and thence to Warwick.

THE SECTIONS.

SURGERY.

At the second session of this section two important subjects were the main topics of discussion—the surgery of arteries, and abdominal surgery.

Mr. BRYANT related a case of Double Popliteal Aneurism, of which one was cured by pressure, and the other by Speir's artery constrictor with antiseptic (not aseptic) precautions.

Mr. THOMSON related the History of his case of Ligature of the Innominate Artery for subclavian aneurism, and showed the specimen. Subsequent speakers were quite agreed that the fatal result was not dependent upon the ligature of the artery, but was due to ulceration of the drainage-tube sinus, probably opening up the vertebral artery; the ligature (ox aorta) had acted perfectly. The experience of this case was held to be encouraging, but it left open the question whether in another case it would not be well to ligature the vertebral artery at the same time as the innominate, even if not the common carotid artery as well.

Mr. A. H. DOLMAN reported a Case of Traumatic Axillary Aneurism successfully treated by ligature of the subclavian artery. So much difficulty was met with in getting the thread around the artery (the left), that the clavicle was divided to expose the vessel.—Mr. BARWELL showed the Aneurism Needle he had had made for cases of this kind, and expressed his belief that had it been employed division of the bone would have been unnecessary.

Mr. BARTLEET read a paper on five cases of Ligature of Large Arteries. One was a case of femoral aneurism, for which he tied the common femoral trunk with chromic catgut; the wound did not remain aseptic, and secondary hæmorrhage came on. The wound was then opened up, when it was found that the artery had separated one-tenth of an inch above the ligature. The two ends of the vessel were then tied with a hempen thread. Again there was repeated secondary hæmorrhage, for which the external iliac artery was ligatured with whipcord, with a final successful result. This case presented many features of great interest from a practical point of view, and would in itself have afforded ample material for a good discussion.

Mr. BENNETT MAY related a case of Ligature of the External Iliac Artery and discussed the best material for ligatures, and stated that there was more difficulty in getting primary union of a wound when chromic catgut was used than when carbolic gut was employed, and he expressed his preference for common catgut soaked for a long while in carbolic oil.

Mr. ROBSON showed an apparatus for obtaining an antiseptic atmosphere to replace the carbolic acid spray in surgical operations. Asserting that while the carbolic acid spray was aseptic, it was not antiseptic, and was also harmful, Mr. Robson advocated the value of an antiseptic, dry, non-poisonous atmosphere. This he obtains by pumping air through cotton-wool to purify it from all suspended impurities, and then through eucalyptus oil. To show the antiseptic value of an atmosphere of this kind, he had taken several large, wide-mouthed glass jars and poured a little of one of these oils into each, and had then suspended jars of sterilised hay infusion in them, and had removed their cotton caps for various periods; in every instance except one bacteria had not subsequently developed in the infusion. He had also used it for surgical purposes, and Mr. Spencer Wells had employed it during the excision of a mamma, and had expressed himself pleased with it.

Mr. R. H. B. NICHOLSON recorded a successful case of gastrostomy.

Mr. GEORGE ELDER related a successful case of nephrotomy and nephrectomy for scrofulous pyelitis.

Mr. LAWSON TAIT showed a girl from whom he had excised a kidney through the linea alba; he also showed the kidney, which was sacculated, and contained a large calculus.

Dr. CULLINGWORTH related a case of nephrectomy by abdominal section for hydronephrosis, in which the patient died from shock twelve hours after the operation; and in reference to this case Mr. TAIT remarked that he should never attempt nephrectomy for renal cysts, as the operation of incising and draining these cysts proved so successful in his hands.

Mr. LAWSON TAIT recorded a third successful case of cholecystotomy, and showed a large number of gall-stones he had removed from the gall-bladder. The gall-bladder formed a prominent abdominal tumour, and it was an interesting feature of the case that although the cystic duct was completely obstructed, there had not at any time been jaundice. He opened the gall-bladder, and stitched the edges of the wound in it to the abdominal incision, and extracted a large number of stones. The discharge had continued mucous until that week, when bile had made its appearance, showing that the duct had become patent again. Mr. Tait therefore intended to freshen the wound, and close the sinus.

Mr. LAWSON TAIT then read a paper on 100 Consecutive cases of Ovariotomy performed during the last thirteen or fourteen months, and in which he had not used any kind of antiseptic measure. Of these, three patients died, one from choking during vomiting, and two from venous thrombosis starting at the pedicle and spreading quite up to the heart. Six of the patients were pregnant at the time of operation, one in addition had acute peritonitis—all got well; one of them miscarried, and five were delivered of living children at term. Four patients had acute peritonitis at the time of operation, and all recovered. In two the tumour was solid fibroma of the left ovary; in ninety-eight it was cystoma. Of the latter eleven were parovarian cysts, sixty were cysts of one ovary only, and among these were the three deaths, and twenty-seven were cysts of both ovaries. In fifty-three cases there were serious adhesions, but he had not found that this fact in any way added to the mortality. Of the three fatal cases there were no adhesions in two, and slight parietal adhesions in the third. In seventeen cases the tumour was sessile. All these cases were dressed with dry absorbent cotton-wool; in about one-twentieth of the cases a part of the wound opened, and then it was dressed with zinc ointment or red lotion. Mr. Tait attributed his improved mortality: (1) To the total abandonment of Mr. Spencer Wells's clamp; (2) to the thorough cleansing of the peritoneum, as recommended by Keith; (3) to the draining of the peritoneum, as recommended by Keith; (4) to increased personal experience; (5) to the diminished number of cases which had been previously tapped; the two of his patients who had died from thrombosis had been tapped, one sixteen and the other thirty times. He believed that if tapping was never adopted there would be no mortality after ovariotomy except from tetanus and similar outstanding risks; (6) the complete abandonment of antiseptic treatment; (7) the establishment of hospital discipline and hygiene; this he deemed of so much importance that in only exceptional circumstances would he consent to operate in private houses.—Dr. WARD COUSINS said that one danger of tapping was rotation of the pedicle on itself.—Mr. COATES (Salisbury) said that it was very difficult to harmonise Mr. Tait's statements with those of Dr. Stokes earlier in the day in reference to antiseptics. But his experience in general surgery was that while before his adoption of the Listerian treatment he did not obtain primary union of wounds in one per cent. of his cases, since that adoption he obtained it in every case. He incidentally mentioned a case of a very large splenic tumour, in which he was urgently requested to do, at any rate, an exploratory operation. On opening the belly and passing in his hand he found a large number of soft very vascular adhesions between the tumour and the abdominal wall, in tearing through which there was very free hæmorrhage; when this had ceased he closed the wound. The patient recovered, and from that time the tumour rapidly shrank in size.—Mr. M. THOMSON referred to the great diminution in the mortality of his cases that Mr. Tait observed when he first adopted the antiseptic treatment, and maintained that the results of general surgery abundantly proved the value of this treatment.—Dr. BANTOCK, in opposition to Mr. Tait, maintained that adhesions of ovarian tumours to intestine and pelvic organs are serious complications of ovariotomy. He had given up antiseptics, and he had not had more septicæmia than other operators who had used it, and he asserted that Listerism had not freed us from septicæmia.—Dr. SUTTON (Pittsburgh) had spent a considerable period in studying European surgery, and he stated that in Berlin, Vienna, Halle, Kiel, and Leipsig he found antiseptics everywhere, and such results obtained with it that on coming to England he dared not have opened the abdomen without employing antiseptics. He then went to see Keith's practice, and his views were changed; for Dr. Keith and his son (who has done five cases) had had a run of fifty-five cases of ovariotomy with only one death; alluding to Dr. Keith's abandonment of Listerism, he said that he had Dr. Keith's authority for stating that he had never used the carbolic spray stronger than was recommended by Prof. Lister. He had also seen Mr. Tait's practice for three or four weeks, and he had been very careful to watch his practice closely; but he had only seen one of his wounds in which there was a drop of pus—one already mentioned by Mr. Tait. In America antiseptic surgery had many friends in the East, but had not made much headway out West; and since the International Congress all American surgeons were waiting to see what the English surgeons would make of this question.—Dr. ED. TAYLOR, who was for some years Mr. Spence's assistant, said that the question

was one of careless surgery *versus* first-rate surgery. Listerism was but a cover for careless surgery, the results of which had been equalled by Mr. Spence's first-rate surgery. —Mr. TAIT, in reply, said that the unfair treatment he had received in London had reached such a point that he had had to threaten one gentleman with an action for libel. He advocated placing the operation of ovariotomy in the hands of a few surgeons only. In reference to the question of antiseptic surgery, he stated that he found one great argument against it in the constant changes which were being introduced into it. One preparation was always being abandoned in favour of another; the original catgut ligature was replaced by the chromic gut; and a new method of preparing the latter was recently introduced. If the practice were so perfect as had been represented, it would not need such constant modifications.

The last meeting of the section was mainly taken up with a discussion on bone-setting, which was opened by Mr. HOWARD MARSH, who referred to the cases benefited by "bone-setters," and urged that these should be taken in hand with more boldness by surgeons, while many cases of stiff joints should be prevented by more judicious treatment. —Mr. W. ADAMS followed with a paper on the same subject, in which he attempted to classify the cases which would be benefited by forcible movement; and he urged that the treatment should be gradual and prolonged, rather than rapid.—Mr. DACRE FOX, who had assisted one of the family of Taylors, for many years "bone-setters," gave a very interesting account of the work of the firm. He said that in his experience "bone-setting" consisted largely in the treatment of recent fractures and sprains, and to only a limited extent in stiff joints. He urged surgeons to take more pains in the treatment of sprains, strains, and other apparently minor and simple injuries, which, if neglected, were often attended with grave inconveniences. — Mr. BERNARD ROTH related two cases of stiff shoulder after injury in which the treatment by forcible movement had not been successful, and he stated that the shoulder joint was not favourable for this treatment.—Mr. PEARCE GOULD, referring to cases in which the adhesions were mainly, if not entirely, extra articular, said that it was of importance to break down all the adhesions at once, and then to persevere with passive movement to the full extent, and gradually to bring up the nutrition of the wasted disused muscles by active movements; perseverance on the part of surgeon and patient was very necessary.—Mr. RICHARDSON CROSS gave the results of his experience at Bristol, which had been rather large.—There was not time to read all the papers set down, and one of the disappointed authors expressed himself as greatly aggrieved at this, and doubtless will not again offer a paper to the Association.

OPHTHALMOLOGY.

At the first session of the Section a discussion on the Extraction of Cataract in the Lens Capsule was opened by Dr. EDWYN ANDREW, who described new instruments to separate the lens in its capsule by tearing through the suspensory ligament. To obviate all pressure upon the globe during the operation he has discarded all forms of speculum, and instead he passes a thread of catgut through one or both eyelids, and by it has the lid or lids held apart and away from the globe. Dr. Andrew advocated a more frequent resort to this operation. The general opinion elicited was that this mode of cataract extraction is good in over-ripe cataract, and that it is easier to perform the older the patient, owing to the lessened resistance of the suspensory ligament in old age. In connexion with this latter point Mr. PRIESTLEY SMITH stated the interesting fact that having experimented on the extraction of the lens and capsule on the dead body in many cases, he had found it was much easier to do it in the corpses of aged persons.—Mr. C. MACNAMARA, whose name is associated with this operation, and who has had a large experience of it, stated that he prefers it to any other in properly selected cases, and particularly in old people.

Next day Mr. ANDERSON CRITCHETT read a paper on the Treatment of Lamellar Cataract, in which he advocated, in preference to removal of the lens, the formation of an artificial pupil by Tyrrell's hook.

Dr. ARTHUR BENSON followed with a paper on the Treatment of Partial Trichiasis. This is an affection which has hitherto been very troublesome, and the plan Mr. Benson recommends is to thrust one pole of an electrolytic machine into the eyelid, towards, or, if possible, into the erring hair-follicle, and to place the other pole on the forehead. The object is to destroy the hair-follicle, and the treatment is continued until the eyelash comes out easily with the root-sheath attached.

Mr. NETTLESHIP and Mr. PRIESTLEY SMITH related three cases of Neuritic Atrophy of the Optic Nerve followed by continuous dropping of watery fluid from the nose. The fluid possessed negative characters, and was not cerebro-spinal. In one of the cases there was evidence of a growth in the nose, and in another the nasal mucous membrane was thickened and excoriated, but whether as the cause or the result of the discharge was not known. In one case there were also curious nervous symptoms, drowsiness and stupor, when the flow temporarily ceased; and during one of these attacks the patient died, but an autopsy was not obtained. Mr. PRIESTLEY SMITH showed at this meeting a new registering perimeter, which had the merits of simple construction and inexpensiveness.

Mr. NETTLESHIP opened a discussion on the value of eye symptoms in the Localisation of Brain Disease. The principal points alluded to were uniocular papillitis, with evidence of intracranial disease; optic atrophy, especially in relation to colour-blindness; hemianopia, and the recently recorded cases of hemiachromatopsia, the author thinking it probable that in most cases of hemianopia the lesion is higher up than the optic tract; cerebral amaurosis from lesion of the occipital lobes; ocular paralyses, peripheral, nuclear, and cortical. Attention was called to several other conditions bearing more or less closely on the subject—e.g., "pseudo-glioma," with brain symptoms, recoverable infantile amaurosis, hydrocephalic choroiditis, megrim, complicated herpes of cranial nerves, and others.—A short discussion followed, in which Dr. Edwyn Andrew, Dr. Hughlings Jackson, and Mr. Priestley Smith took part.

PATHOLOGY.

At the first meeting of this Section considerable inconvenience was occasioned by the failure to keep his engagement of Professor Hamilton, who had promised to open a discussion on the Pathology of Diabetes.—Dr. STEPHEN MACKENZIE was called upon, without notice, to take his place, and specially referred to the cause of death in diabetes, and the nature of diabetic coma, which he discussed, maintaining that it was complex, in the majority of cases being due to acetonæmia, and in only a small proportion of cases due to fat embolism. He agreed with others in believing this coma to be most common in young subjects. The statistics of the London Hospital were quoted to show the relative frequency of the various complications of diabetes—Dr. PAVY enunciated his well-known views on Glycogenesis and Glycosuria.—Dr. SAUNDBY stated that although he had carefully looked for it he had not often succeeded in demonstrating fat embolism in death from diabetic coma.—Dr. SHINGLETON SMITH contended for the nervous origin of diabetes; and as one piece of evidence, related a case of tumour in the cervical region of the spinal cord, which was accompanied with glycosuria. At the same meeting,

Dr. SAUNDBY read a paper on the changes in the Sympathetic in Bright's Disease, and detailed observations of his own.

Dr. HUGHLINGS JACKSON read a paper by Dr. Gowers to accompany a demonstration of microscopical specimens of morbid changes of the spinal cord.

At the second meeting of the Section,

Mr. JONATHAN HUTCHINSON, in a speech considerably exceeding the recognised limit of time, opened a discussion on the etiology of tumours, in which he insisted on their local origin, and dwelt particularly upon rodent ulcer and the precancerous stage of disease.—Sir JAMES PAGET followed, and quoting many cases illustrative of his views, contended for the dual origin of malignant tumours, constitutional tendency, and local change. — Mr. BUTLIN gave an excellent demonstration of the microscopical appearances of the chief forms of tumours. — Dr. THIN showed some hairs in which trichophyton tonsurans had been artificially cultivated; and Mr. ABRAHAM gave a very interesting demonstration of granulation tissue in a sponge network as obtained in the new process of spongegrafting.

A paper on Sarcoma of the Bladder was read by Mr. R. WILLIAMS.

The closing meeting was opened by an exhaustive paper on Rodent Ulcer by Dr. SANGSTER, in which he clearly

established the fact that the disease is not primarily connected with the sweat-glands, but that the morbid change starts from the Malpighian layer and outer sheath of the hair-follicles.—Dr. THIN disputed this view. The rest of the morning was occupied with a demonstration of various forms of bacilli, which excited a good deal of interest, and was one of the most successful events of the meeting.—Dr. HERON showed Ehrlich's process of preparing tubercle bacillus, and he was followed by Dr. GIBBES, who demonstrated his process of preparing the same bacilli, which was described in THE LANCET of August 5th. It was very evident that this process, while decidedly simpler than Ehrlich's, was also more effective, and is, therefore, more useful.—Dr. S. MACKENZIE also showed a specimen of Tubercle Bacillus prepared by Goltdammer's method.—Dr. SHINGLETON SMITH showed Bacillus Anthracis, and Dr. THIN the Bacillus of Leprosy.

PUBLIC MEDICINE.

At the first meeting, Dr. SWETE, in an interesting paper, detailed the various sanitary improvements carried out at the Worcester Infirmary since its foundation, and in this way gave a sanitary sketch of the advance of sanitary science during that period.

The two chief discussions were on the Notification of Infectious Disease, which was further debated at a general meeting, as reported above; and on the Public Medicine aspects of the Alcohol Question, which was introduced by Dr. NORMAN KERR, who said that some diseases were caused by alcohol alone, as delirium tremens, dipsomania, and alcohol poisoning, acute and chronic. Some, which arose from other causes, sometimes were caused by alcohol directly, as alcoholic phthisis, gout, and paraplegia. Alcohol might also be a main contributory factor, as in fatal frostbite and sunstroke after drinking. The proportion of sickness and death from alcohol had been shown in the Government returns of the Indian Army for 1849. The mortality of the temperate was double, and that of the intemperate quadruple that of the total abstainers. The abstaining deaths were 11·1 per 1000; the temperate 23·1; and the intemperate 44·5. The admissions of the abstainers were only 10·7 per 1000 less than those of the temperate, showing that the diseases of the former took a milder form. This experience was confirmed by a recent actuarial report, comparing the sickness of the Sons of Temperance with three groups of non-abstaining friendly societies. The average sickness per annum of the temperance "Sons" was 7·48 weeks; of the Oddfellows (City) 26·20; (Rural) 24·68; and of the Foresters 27·66. Insurance companies were so satisfied of the superior healthfulness of the abstinent, that one had paid the abstainers insured 23 per cent. additional bonus, and another offered an extra bonus of 20 per cent. The United Kingdom Association showed a 17 per cent. lower death-rate in the abstaining than in the general section. In Glasgow there had been a sudden increase of nearly 1000 deaths in the year that the lowering of the spirit duties began to operate. The influence of alcohol on the death-rate was well illustrated in the following table from the Registrar-General's report for 1880:—

Mean Annual Rate of Mortality in England for Three Quinquenniads.

Classes.	Cause of Disease.	Annual Deaths to 1,000,000 Living.		
		Five years, 1865-9.	Five years, 1870-4.	Five years, 1875-9.
I.	Zymotic Diseases .	5171·2	4842·0	3887·6
II.	Constitutional . .	4145·4	3771·8	3631·0
III.	Local	8887·2	9151·0	9845·0
IV.	Developmental . .	3005·0	3362·2	3037·0
V.	Violent Deaths . .	797·4	750·4	744·0

From this table it would be seen that in every class except one the mortality had steadily diminished; but in Class III. the mortality had as steadily increased. In this class the principal increase had been in deaths from diseases of the brain and nervous system, of the organs of circulation, of the respiratory organs, of the liver, and of the kidneys. These were precisely the organs most apt to be seriously affected by indulgence in alcohol. Dr. Kerr had estimated the annual deaths from personal intemperance in the United Kingdom at 40,500. Dr. Morton's estimate was equivalent to 14,000 more. The Harveian Society's first inquiry showed results equal to 2300 more deaths for England and Wales than Dr. Kerr had attributed to the whole kingdom. Their second inquiry would give nearly 10,000 more than his own computation. Dr. Richardson put the figures at 50,000. The indirect fatality by violence, disease, poverty, &c., arising from the intemperance of others was probably double the mortality of the personally intemperate. Dr. Noble's and Dr. Richardson's ascription of one third of the total deaths would amount to 235,775 deaths from alcohol in 1880, far beyond Dr. Kerr's estimate of 120,000 in all. The association ought to ask returns from 500 practitioners in different parts of the kingdom, to afford a fair basis for an accurate estimate. The amount of alcohol ordered to the poor ranged from none at all up to £4 6s. 5*d.* per pauper. There had been a great reduction recently. In Greenwich and Whitechapel this had been two-thirds of the alcoholic expenditure, in Shoreditch one-half, and in Wandsworth and Clapham nine-tenths. At St. George's the charge for alcohol had fallen from £1500 per annum to £13. In St. Marylebone, in 1881, the cost was £1633 in the workhouse. During the three quarters already expired of 1882, the cost in the workhouse was *nil*, and in the new infirmary £280. This showed a reduction of £1300 per annum. The health of the inmates had not suffered, while their good conduct had improved. The Habitual Drunkards Act was very imperfect—the applicant for admission to a retreat having to confess himself an habitual drunkard before two magistrates; but it was desirable to give it a fair trial. It was hoped to open the Dalrymple Home for Inebriates this year, and financial support was much needed. For the cure of dipsomania, total abstinence was indispensable. Heredity was the chief predisposing cause. The marked increase in the variety and consumption of unintoxicating beverages was an aspect of the question which called for the consideration of students of public health, as an increased use of non-intoxicants was a favourable omen of the future improved sobriety and consequent health of the community.

The second meeting was devoted to a lively discussion on the compulsory notification of infectious diseases. Dr. RANSOME led off with a paper on the Scientific and Practical Objects of Registration of Disease, in which he strongly advocated compulsory notification.—Dr. CARTER, of Liverpool, as strongly opposed this, and he urged that it was necessary for those towns which had adopted it to show a greater diminution of zymotic diseases than occurred in other towns which could not otherwise be accounted for. Such proof, he alleged, had not been given; for instance, Bolton, which had such an Act in force, had not progressed so fast as Liverpool, which was without the Act, or the country generally. The Act led to concealment of disease, as he showed by ascertained cases. He feared, too, that the demands made in the name of science would be greatly increased, and this, putting compulsion on medical men, compulsory removal to hospital, and compulsory closure of shops and schools would soon be followed by still more arbitrary requests. The discussion was finally transferred to the ensuing general meeting, as reported elsewhere.

OBSTETRIC MEDICINE.

The President, Dr. Leishman, was unable to attend, and the chair was taken by Dr. COGHILL, who made a few introductory remarks.

Dr. BANTOCK read a paper on his cases of Hysterectomy, and in the subsequent discussion Drs. J. Williams and Wallace strongly deprecated a frequent resort to this operation, asserting that the cases justifying it were not numerous.

Dr. EDIS gave a *précis* of the rational treatment of Menorrhagia, and Dr. C. H. ROUTH described a form of Dysmenorrhœa associated with Gonorrhœa.

The second meeting was entirely taken up by a discussion on Subinvolution of the Uterus, its causes, its relation to uterine disease, and its preventive treatment, which was opened by a paper by Dr. JOHN WILLIAMS. He referred to the various methods for determining the progress of the involution of the uterus after delivery and to the work of Heschl, Dupaul, Serdukoff, Milsom, and Sinclair. The uterus disappeared into the pelvis on or before the twelfth day after delivery, when involution goes on healthily. Taking this as a standard, Dr. Williams found, from the study of 113 cases, that the causes of involution are post-partum hæmorrhage, retention of portions of placenta or membranes, lacerations of the perineum, pelvic inflammations and fever during the lying-in

period. Lacerations of the cervix do not appear to give rise to it. Subinvolution causes menorrhagia, dysmenorrhœa, and prolapsus. The pelvic inflammations so frequently associated with it are not its results. Its preventive treatment consists in completely emptying the uterus after delivery, maintaining an efficient contraction of the organ, and preventing fever. The best means of securing the two last are the frequent use of hot disinfecting vaginal injections, and perfect closure of tears of the vaginal orifice.

MEETING OF FELLOWS OF THE COLLEGE OF SURGEONS AT WORCESTER.

A MEETING of Fellows of the Royal College of Surgeons of England, called by advertisement, was held at the Medical Library, Worcester, on Thursday, August 10th, President C. G. Wheelhouse, Leeds, in the chair. There were present: Mr. William Adams, London; Mr. Allard, Tewkesbury; Mr. J. Archer, Birmingham; Mr. Banks, Liverpool; Mr. Balding, Royston; Mr. Carter, Pewsey; Mr. Cowell, London; Mr. Crosse, Norwich; Mr. Cornwall, Fairford; Mr. Pearce Gould, London; Mr. Harris, Redruth; Mr. Reginald Harrison, Liverpool; Mr. Hacham, Birmingham; Mr. Husband, Bournemouth; Dr. Howard, London; Sir William MacCormac, London; Mr. Manby, Wolverhampton; Mr. Rushton Parker, Liverpool; Mr. Augustin Prichard, Clifton; Mr. Oliver Pemberton, Birmingham; Mr. Solomon, Birmingham; Mr. Lawson Tait, Birmingham; Mr. Teale, Leeds; Dr. Rayner, Stockport; Mr. W. L. Underhill, Tipton; Mr. Welch, Honiton; Mr. Watkin Williams, Birmingham; Dr. Roger Williams, London; and Mr. Bartleet, Birmingham. Mr. Bartleet said he had received numerous letters approving of the meeting at Worcester, and expressions of regret at inability to attend from Mr. Macnamara, London, and Mr. Pilcher, Boston. Mr. Wheelhouse and Mr. Bartleet having explained the objects of the meeting, it was proposed by Mr. Lawson Tait, seconded by Mr. Oliver Pemberton, and after considerable discussion resolved *nem. con.*, "That an Association of Fellows of the Royal College of Surgeons of England be and hereby is formed." "That the objects of this Association be the consideration of all matters affecting the interests of the Fellows and the government of the College." "That the Annual Meeting of this Association be held at, and during, the annual meeting of the British Medical Association." "That the Fellows attending the present meeting do form a Committee of this Association for the present year, and that Mr. Wheelhouse be President, Mr. Husband Treasurer, and Mr. Pearce Gould and Mr. Bartleet Secretaries, and that all Fellows of the College be eligible as members upon payment of an annual subscription of five shillings."

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting of the Poor-law Medical Association was held at Worcester on the 9th inst. Dr. Joseph Rogers of London (President of the Council) presided, and observed that within the last two years, in consequence of certain occurrences, he had made up his mind to abandon as far as he was individually concerned the idea of appealing to the Local Government Board, and had determined to endeavour to mould their Association into a mutual defence association. As the result of his experience he was inclined to say that a most unkind feeling existed throughout the country between boards of guardians and their medical officers. He believed it arose from the circumstance that the pauper poor were looked upon as a horrible incubus by boards of guardians, and therefore anybody who had anything to do with them was tarred with the same brush.

The hon. secretary (Mr. Wickham Barnes) read the financial report for the year, and stated that there was a small balance in hand.

A general discussion then took place, in which various grievances of Poor-law medical officers were referred to, and the best method of their remuneration was canvassed. The necessity for greater liberality on the part of the class of officers for whom the Association was established was also insisted on.

ENDEMIC HÆMATURIA IN EGYPT.

To the Editor of THE LANCET.

SIR,—The circumstance that *The Times'* correspondent at Alexandria has telegraphed words of warning and alarm must be my apology for reopening this important subject.

The observations made public on the authority of Dr. Mackie seem to state the case very fairly, and professional readers of the telegram will have at once concluded that the "parasite" causing the disease was none other than the now well-known Bilharzia hæmatobia. As probably no European doctor has seen more cases of this kind than Dr. Mackie, the remarks are valuable, but perhaps it will be useful to supplement them.

When the Eastern Telegraph Company ascertained that their officers were suffering from the bilharzia disorder they acted with great promptness, and at their request I drew up a memorandum recommending certain prophylactic measures. This was printed and issued to the company's stations and employés. Guided by my advice the Board of Management allowed all their clerks to return home, placing six of these gentlemen under my professional care. It may serve to abate alarm when I state that none of the patients had the disorder in its severest form, and were it not that the symptoms had been aggravated by repeated attacks of intermittent fever, the general health of the victims would not have seriously suffered. Without doubt Dr. Mackie has good reasons for authorising *The Times'* correspondent to say that the disease is "often fatal," but so far as my observation extends the prognosis is generally favourable in uncomplicated cases if the patients are removed from the locality of infection. The exceptional instances are those in which there is an unusual degree of infection. In such cases even the strongest patient must sooner or later succumb to anæmia and its consequences.

Into clinical details one cannot now enter, but my meaning will perhaps be better understood if I place what may be respectively called "slight" and "excessive" invasions in contrast. In cases of the former kind not more than a dozen or so of the parasite's eggs will be passed at each act of micturition, whereas in the latter it is not uncommon for the patient to pass fifty, or, for that matter, a hundred dozen bilharzia eggs at a time. In severe cases the daily average of evacuated ova greatly exceeds this estimate. As before hinted, however, the severity of the symptoms and consequent dangers are, as a rule, more dependent upon associated disorders than upon the actual number of parasites present.

The natural history bearings of the bilharzia endemic are of great interest, especially in relation to sanitation and epidemiology. As, however, I hope to be able to draw attention to this part of the subject at the forthcoming Southampton meeting of the British Association, I will only add that what little was advanced on this score in the telegram of last week is in perfect accord with the results of recent scientific inquiry.—I am, Sir, yours truly,

T. SPENCER COBBOLD, M.D., F.R.S.

Portsdown-road, August 14th, 1882.

PRESENTATIONS.—Last week a silver epergne and two silver candelabra to match were presented to Mr. John Bowes, of Richmond, Yorks, in recognition of the value of his professional services rendered to the town during a residence of fifty years.—On the 11th inst. a meeting was held at the National Schools, Seaforth, to bid farewell to Dr. Swaby Smith, who, after fifteen years' residence in the town, was about to remove to the West-end of London. An illuminated address was on the occasion presented to Dr. and Mrs. Smith, accompanied with a purse containing a hundred guineas, subscribed for by the members of St. Thomas's Church.

MR. R. CLAYTON MERCER, late of Accrington, has bequeathed £1000 to the Victoria University, Manchester, for the foundation of a scholarship in chemistry; £500 to the Manchester Royal Infirmary; £500 to the Manchester Eye Hospital, and £500 to the Blackburn and East Lancashire Infirmary.

BEST COPY AVA

THE LANCET.

LONDON: SATURDAY, AUGUST 19, 1882.

THE position of a jubilee orator is not an easy one to fill. He is expected to survey the progress of things from the standpoint at which he has arrived, and to embrace the past, the present, and the future within his view. Of course this expectation relieves him of the trouble of seeking for a subject on which to discourse, with the uncertainty whether such subject is after all the most suitable for the occasion; but then, on the other hand, he may find, if he has to deal with such rapidly growing subjects as medicine and surgery, that the material at his command is far too abundant to be satisfactorily utilised or rendered palatable to his hearers. It was, then, doubtless with a sense of relief that the members of the British Medical Association listened to the orators of last week, and found that, although they had recognised what was required of them, they had resolved to attempt no comprehensive survey, but to deal rather with the leading principles and the directions in which their sciences are moving. This was pre-eminently the case with the orator in Medicine, Dr. WADE, who, in a sober and thoughtful address not marked by the impassioned eloquence of his surgical colleague, advocated the claims of rationalism in therapeutics as the aim of modern medical endeavour. Naturally his thoughts turned back across the half-century which had passed by since the medical men of England under CHARLES HASTINGS formed themselves into an association, and his comparison between the state of medicine then and now—a contrast which Dr. STRANGE had so admirably depicted the day before—centred in one great prophylactic and therapeutic measure, which had then nearly reached the limit of its popularity after an undivided sway for centuries over the medical mind. To those who have been educated in these latter days, the attempt to realise the extent to which this practice was carried in their fathers' times is almost impossible. The steps that led to this great revolution—the almost entire abandonment within a few years of a routine measure, in the efficacy of which there had been previously such abounding faith—were well described by Dr. WADE. It was a time of general upheaval, political, social, and indeed scientific; for science was then beginning to assert herself and to disturb settled dogmas of all kinds. No wonder that the dogma of the efficacy of bloodletting fell before the assaults made upon it by the scientific mind of MARSHALL HALL, supported as his arguments were by a body of facts obtained by experiment. Along with this questioning of authority there arose a new faith, which some would strangely miscall scepticism—faith in the powers of nature to restore the deranged mechanism to its integrity with or without assistance. The truth is that as our conceptions of the nature of disease widen, so necessarily must our belief in the recuperative power of nature expand; and the line in which therapeusis has to run is not in thwarting this natural tendency, or in lowering vitality by depletion and purgation, but in supplying where indicated such reinforcement to the natural processes as may hasten the process of recovery, in removing the obstacles from the way, and in withholding the administration of that which may injure or retard the restoration. Those who think that by so doing medicine is falling from her high estate are but shallow-minded people after all—who imagine that vigorous and violent measures are the test of wealth of resource and of skill in treatment, and who would rather a dying man were tormented with all the drugs of the Pharmacopœia than that his path should be eased in its inevitably downward course. With the fall of bloodletting passed away other measures of so-called heroic therapeutics, and we look forward to the time when, with fuller knowledge of the action of remedies as well as of the natural processes of disease, medicine may become more and more entitled to take rank as a strictly defined science.

Whether this desirable state of things will receive speedy realisation may well be doubted. Errors there will be, many (like those instanced by Dr. WADE of the treatment of delirium tremens by digitalis, and of acute inflammatory diseases by alcohol) based on false generalisation, whereby systems of treatment are blindly perpetuated, and specifics vaunted on insufficient evidence. For with increasing knowledge comes the clearer revelation of the complexity of conditions that combine to make disease what it is, and yet it is so difficult to detach oneself from preconceived notions in its treatment. In one direction, at the present day, Dr. WADE thinks we are going astray; we are aiming too much at giving nutriment to an enfeebled frame, and too little at attempting the restoration of deranged function. This may be so; but how difficult it is for us, if we wish to walk by sight and not by faith alone, to continue to employ remedies the precise action of which, on general grounds, is often problematical, and as regards the patient is certainly so; bound down to certain rules of dosage and the like, and ignorant of a large part of the functional disturbances we are seeking to set right. Although, then, the scientific practitioner may be alive to the importance of pursuing rational therapeutics, although he may be persuaded that physiologically such or such a line of treatment is the most correct, yet is he constrained by certain arbitrary rules of his art, by certain generalisations framed by others, to adopt measures which may be not only unsound physiologically, but even harmful to the individual patient. What need for surprise, then, if he prefer to stay his hand, and, under judicious watchfulness, leave the cure in the hands of nature, bringing to her assistance, when necessary, such aids as seem most suitable. Medicine must make progress, but it must advance slowly in the direction of treatment if that treatment is to be based on the only sound foundation, that of the physiology of disease, or, in other words, of *pathology* in its broadest signification.

THE event of greatest interest to the surgeons assembled at Worcester was undeniably Professor STOKES'S Address. The occasion—the jubilee of the Association,—the honoured name inherited and the high reputation borne by the orator, demanded a contribution to surgical literature of more than passing value. In substance, in form, and in delivery, the Address was fully equal to all expectations and hopes, and to his character as a skilful and wise surgeon Professor

T COPY AVAILABLE

STOKES has now added the reputation of an orator worthy of his country. We do not here purpose to follow him in all the points of his excellent Address. We concur fully in his choice of the three greatest advances in surgery during the last half-century so far as anæsthesia and the antiseptic treatment are concerned, and we well appreciate the reasons which led him to place osteogenesis as the third. We would, in passing, commend the scientific candour with which he admitted the claim of America to the introduction of anæsthesia into surgical practice, and the eloquent appeal for greater freedom in physiological investigation which naturally sprang from his sketch of the introduction of osteoplastic surgery, for the establishment of which experiments on living animals have proved so useful. The chief burden of the Address was the value of aseptic surgery, and none who heard it could fail to have been impressed, not only with the orator's knowledge of the facts, his thorough conviction of the soundness of the practice he advocated, and the eloquence with which he pleaded, but also, and perhaps even chiefly, with the earnest tone which ran through his whole appeal. He spoke as one to whom this was more than any mere scientific theory or discovery, or the doctrine of any school—as one who felt that it was a matter of stern duty and heavy responsibility, who felt that it was time that all personal predilections and personal pride should be put away in face of the ever-accumulating facts. It was a remarkable criticism on this Address that but a few hours later surgeons were attributing their success in abdominal surgery partly to the abandonment of all antiseptic measures, and were speaking of it as a cloak of careless surgery. Such discrepancies must arrest the attention of all intelligent observers; and assuming, as we are bound to do, that the facts stated are accurate, we must look for the explanation of the discrepancy in the mode of statement or in the deductions drawn therefrom. The position taken up by Mr. LAWSON TAIT is certainly an extreme one. He states that his latest brilliant results in ovariotomy are partly attributable to his discontinuing to use any so-called antiseptic measures. Although he at first thought that the adoption of LISTER'S treatment had greatly lessened his mortality after this operation, he now teaches that in this he was deceived, and that the improved results were due to other modifications he introduced into his practice at the same time. It is not any change of opinion, however, that we would now discuss, but rather the facts alleged. We do not know what views Mr. LAWSON TAIT may hold as to the origin of septic diseases; for ourselves, we are content to accept the "germ theory," as it is now generally called. On the one hand, then, we have Professor LISTER, Professor STOKES, VOLKMANN, NUSSBAUM, ESMARCH, and a whole array of other surgeons, asserting that just in proportion as they have employed efficient means of preventing the access and development of "germs" in wounds and discharges, have they been able to banish entirely all forms of septic disease from their practice, even under conditions in which such diseases have before been rampant. On the other hand, we have Mr. LAWSON TAIT recommending the entire abandonment of all antiseptic precautions. But he comes altogether too late to succeed in controverting Mr. LISTER'S doctrine and practice. The history of surgery shows conclusively that wounds treated without regard to asepsis are liable to putrefactive changes and septic complications. No amount of statistics such as Mr. TAIT adduces can prove the negative. Their sole value is to show that in that particular operation asepsis is secured by other means than antiseptic dressings. Nothing can ever upset the established fact that the antiseptic treatment of Mr. LISTER, where thoroughly carried out, has reduced the mortality from septic diseases in a far greater degree than any or even all other improvements in wound dressing that have ever been introduced. When facts at first sight at variance with these are observed, the scientific course is to see in what way they can be reconciled with them, and not to concentrate attention on them, and refusing to look beyond them, affirm that in them alone, and in one interpretation of them, lies "the truth, the whole truth, and nothing but the truth." Mr. TAIT'S facts support Mr. LISTER'S views rather than contradict them. He is an experienced and skilful operator who leaves the parts in the best condition for healing, and disturbs them as little as possible. When the wound is entirely closed, the conditions for primary healing are satisfactorily secured, the cut surfaces are maintained in exact apposition, no tension exists, there are no foreign bodies in the wound, and on the inner surface is a membrane in which plastic exudation occurs with remarkable rapidity. The wounded parts in the cavity within are then shut off from all outside contamination, tension from retained fluid does not occur, absorption rapidly ensues, and even if "germs" have been admitted during the operation, they do not find a suitable nidus for development if the fluid does not accumulate. In the cases that are drained, on the other hand, the fluid is allowed to escape as fast as it is secreted, there is never any cavity nor retained fluid, and thus again asepsis is secured. The real reading of Mr. TAIT'S figures would therefore seem to be that he has learnt from experience exactly when it is necessary to use a drainage-tube, and thus avoids all retention of peritoneal secretion, and all probability, or even possibility, of septic decomposition within the abdomen. It is therefore quite unscientific to suppose that Mr. TAIT'S experience can be used as an argument against the aseptic treatment. One of Mr. TAIT'S attacks upon Mr. LISTER'S teaching was singularly unhappy. He urged that the frequent changes in and additions to the aseptic treatment afforded a strong argument against its value. This development of the practice is, on the other hand, one of the surest signs of its vitality and truth. Mr. LISTER has never wavered from his original assertion of the principle of his treatment, and just as soon as he announces finality in his practice will he forfeit his claim to the character of a scientific surgeon. To improve methods is not to change a principle. Because a ligature acknowledged to be imperfect has been replaced by a better one, it in no way follows that the principle of using an absorbable animal material has been found faulty. In a word, then, antiseptic surgery showed no signs of waning vigour at the Worcester meeting, and nothing that was stated there need in any way disconcert any follower of Mr. LISTER.

We have not sufficient space to refer to the other topics of interest that were raised. The surgery of arteries proved an attractive subject of debate, and evidently we are far

from finality in this direction. The most important communication on this head was undoubtedly Mr. THOMSON'S case of ligature of the innominate artery, which though unfortunately not successful, will accomplish a useful purpose if it brings the conviction that this operation is not beyond the pale of surgery. The discussion on bone-setting shows that the younger generation of surgeons are more alive than their seniors to their responsibilities in this direction. The subject is worthy of more study than it has generally received, and we hope that Mr. DACRE FOX'S appeal will be responded to. Mr. GREIG SMITH suggests that operative interference in diseases of joints should be pushed even beyond its present limits. In all directions the outlook of surgery as presented at Worcester is encouraging; there are signs of advance all along the line, and of men rising up to take the places of those to whom surgery owes so much of its progress during the last five decades.

A GOOD *résumé* of the opinions at present held in regard to colour is given by M. J. SOURY, in the *Revue des Cours Scientifiques*. The theory, which may now be called old, though it replaced that of NEWTON, is the YOUNG-HELMHOLTZ theory. According to this, the retina of man possesses three distinct kinds of nerve fibrils, each of which is capable of distinguishing one of three colours supposed to be fundamental or elementary. One of these sets of fibres is sensible to red alone, another to green, and the third to violet or perhaps to blue. Our entire chromatic scale is made up of combinations of these three primary colours. Every sensation is due to the excitation of the fibres of the retina by these tints, each set of fibres being strongly stimulated by its own special excitant, and feebly stimulated by the others. In the case of red, for example, the terminal apparatus of the fibres adapted for conducting red are powerfully stimulated by the large waves of the less refrangible extremity of the spectrum, whilst the terminal apparatus of the nerves adapted for green and violet are very feebly stimulated, and the sensation of red is the result. In like manner, when the sensation of green is perceived, the terminal apparatus of the nerves adapted for conducting the impression of green are stimulated by the waves of moderate amplitude in the middle of the spectrum, whilst the red and violet fibres respond but slightly to such waves, and the sensation of green results. And so, too, the fibres adapted for conducting violet respond to the short and rapid waves of the more refrangible rays which have only moderate action on the green and still less on the red conducting fibres. The intermediate colours, such as orange, are due to the simultaneous stimulation of the several sets of fibres to a greater or less extent, and when all these sets are equally excited, the impression of white light results.

Lately, a new theory—that of HERING—has been advanced. According to this physicist there are six simple sensations of vision, and the various colours seen result from their different association and blending. These elementary sensations are disposed in couples or antagonistic pairs: black and white, green and red, yellow and blue. On this theory violet is a compound colour formed by the blending of blue and red, and in an ordinary perception of colour four primary sensations are excited: black and white and two colours; but the blue and the yellow are never simultaneously excited, nor are the red and the green. When the blue sensation is experienced the yellow is virtual, and, though present, is not perceived by the mind. Black and white are capable of mingling, and produce all the shades of grey, but red and green or blue and yellow have no disposition to blend, but rather behave like the poles of an electric battery, and it is in this sense that the school of HERING, of which HAPPE is the chief exponent, speak of the polarity of colours. The organic substratum of colour sensation, according to HERING, is not the terminal apparatus of the nerve fibre itself, but certain hypothetical substances, such as the visual purple, which undergo chemical change. On looking at "white" light, the visual purple, by a photo-chemical process, is constantly undergoing decomposition and destruction, and is as rapidly restored. Red light decomposes the visual purple slowly, violet light decomposes it more rapidly. Further, on HERING'S theory, processes both of disassimilation and of assimilation are supposed to take place, so that when exposure to red light has exhausted or partially destroyed the visual purple, or its mother substance, purpurogene, green light aids in the reparation of this material, and fits the eye again for perceiving red light. Black does the same office for a retina exhausted with white light, and blue for yellow. This theory affords a good explanation of the phenomena of contrast, and of complementary colours. A red wafer placed on a sheet of white paper gives the sensation of a vivid red disc. As long as it is looked at it causes disassimilation of the retinal purple, which is as constantly renewed; but if the eyes be closed, the sensation of red vanishes, and is replaced by green. Why? Because assimilation is now taking place in excess of disassimilation. When one of these states is equal to the other two, the two antagonistic sensations are reciprocally destructive. Hence red and green do not blend to form white. The third theory, originally suggested by DRAPER, and more recently developed by PREYER and by CHARPENTIER, refers the colour sensations we perceive to modifications of temperature. PREYER distinguishes the quantity or intensity, the quality or tone, and the temperature. The intensity depends on the force with which the retina is impressed by the ethereal waves; the quality on the nature of the excitation caused by the vibrations of the particles of ether constituting the waves; vibrations the rapidity of which increases with the diminution in the size of the waves. In regard to temperature, PREYER differentiates the colours into hot and cold—the warm colours are red, orange, yellow, and yellow-green; the cool colours are green-blue, blue, and violet. CHARPENTIER, who has just completed a series of researches with LANDOLT, finds that the statements recently made to the effect that certain zones of the retina are specially adapted for the perception of certain colours have been founded on imperfect observations, and that even the most peripheral portions of the retina can differentiate colours providing they are sufficiently intense. Aware of the observations of MUNK and SAMELSOHN, the former of whom seems to have demonstrated that the seat of chromatic sensation is in the cortical layers of the occipital lobes, whilst the latter has published a case of hemianopsia, in which the sense of

space was preserved in the affected half of the retina while the chromatic sense was lost, CHARPENTIER differentiates in every normal eye a sensibility for light, a sensibility for colour, and a visual sensibility or sensibility for form. In every chromatic impression made on the peripheric regions of the retina he further distinguishes three phases: a simple impression of light, a vague indeterminate impression of colour, and a distinct impression of the true colour. The first phase he thinks clearly proves that the luminous sensation is distinct from that of colour, that it is the result of a simple excitation of the optic nerve, but in the second phase the cerebral centres for colour are excited, and the reason that a quicker and surer recognition of colour is made by the macula and central parts of the retina is only because they are more used. The sense of colour and of light being a general function of the retina, he regards neither the rods nor the cones as the retinal elements which are stimulated by chromatic stimuli. He rather looks to the layer of ganglionic cells which lie on the anterior part of the retina as the functionally active elements. It is clear that there is still a wide field for research in this subject open to the scientific explorer.

THE Report of the Select Committee of the House of Commons upon the administration, operation, and effect of the Contagious Diseases Acts of 1866 and 1869 has just been published. The Committee was first appointed in June, 1879, and was continued by four subsequent reappointments, so that the inquiry has extended over a period of upwards of three years. The subject was divided by the Committee into two branches: first, the hygienic effects of the Acts; and, secondly, the constitutional, moral, and social aspects of their principles and administration. And this division has been followed in the Report, prefaced by a summary of the provisions of the Contagious Diseases Acts, and a statement of the recommendations of the Royal Commission of 1871.

Under the first head—the hygienic effects of the Acts—a very careful analysis is given of the statistics obtained from the Army returns, a comparison of the results as to disease at the military stations subjected to the Acts and those unsubjected to them, and an investigation into the extent of the fluctuations in the proportion of cases occurring in the two groups respectively during periods prior and subsequent to the introduction of the Acts. The Committee also had under consideration an objection which has been often raised to the Army statistics, that under the head of "primary venereal sores" are included two different forms of the disease—the hard, or, as it is termed by some, the "infecting" sore, and the soft or "pseudo-syphilitic." They came to the conclusion that this was unavoidable, and did not appear "to interfere with the value of the departmental statistics of the disease." It would be impossible, in the space at our disposal, to enter upon the details of this portion of the Report, but we recommend the study of them to all who take an interest in the question. The conclusion at which the Committee arrived as regards the effects of the Acts on the efficiency of the Army is, that "out of 16·69 per 1000 who would probably have been withdrawn from the efficient strength of the Army in the subjected districts, if they had not been under the Acts, 5·38 per 1000 have been daily saved to the efficient strength of the army by the operation of the Acts. To this saving ought to be added the gain to the service derived from the increased immunity of the men from the various debilitating and incapacitating disorders which, though not classed as venereal diseases, not unfrequently result therefrom." The Committee also report as their opinion that the Acts have had a beneficial effect in reducing the amount of venereal disease among the civil population, and in diminishing the virulence of the disease among the prostitutes in the subjected districts. They conclude by saying that the "extent to which the Acts have diminished primary and constitutional syphilis in the subjected districts appears of itself to your Committee to establish the hygienic utility of the Acts. The diminution of gonorrhœa in the subjected districts, attributable to the Acts, in the same period is less considerable, but substantial."

Under the second head of the inquiry—the constitutional, moral, and social aspects of the principles and administration of the Acts—the Committee carefully considered the objections raised against them by the opponents, and the advantages (other than hygienic) claimed for them by the advocates, of the Acts. The conclusion at which they arrived was that the objections were not sustained by the evidence adduced in support of them. One of these appeared to the Committee so serious, that if it could be proved, it would be fatal to the maintenance of the Acts: "that virtuous women may be, and are, brought under their operation." They therefore spared no labour in probing it to the utmost, with the result that "the charges of misconduct brought against the police have broken down, and they desire to record their concurrence in the opinion expressed by the Royal Commission, 'that the police are not chargeable with any abuse of their authority, and that they have hitherto discharged a novel and difficult duty with moderation and caution.'" The Committee consider that the Acts are shown to have been beneficial by the diminution of prostitution in the subjected districts, and especially the diminution of juvenile prostitution, by the improvement of the physical condition of the women, and by the promotion of public order and decency in the subjected districts.

After this protracted, careful, and patient inquiry, the Committee came to the conclusion that they could not recommend the repeal of the Acts. They state very forcibly that the repeal in districts where they have been in operation for thirteen years and more would mean: "*a*. Full licence for venereal disease of all kinds to disseminate itself unchecked either by police or by hospital treatment. *b*. A serious diminution in the effective strength of our army and navy, which would be especially felt in the event of their services being suddenly called into requisition. *c*. The relegation of numbers of these unhappy women to the state of hopeless misery, squalor, and disease in which they lived before the system was introduced. *d*. The letting loose of increased crowds of abandoned women and girls of all ages upon streets and thoroughfares swarming with soldiers and sailors, with little or no practical check or control over their behaviour. It is scarcely surprising that such a prospect should excite feelings of dismay in the

minds of the more intelligent and thoughtful inhabitants of subjected districts."

The Committee do not recommend the extension of the Acts to the United Kingdom generally, apparently from a feeling of deference to the opinions of a considerable minority opposed to it; in other words, because public opinion is not yet ripe for such an extension. But they are decidedly of opinion that "it would be unfair to soldiers and sailors, and unwise from the point of view of the efficiency of the service, to abolish a system which, in localities favourable to its maintenance, has been found effective for rescuing men of both services from diseases to which they are especially exposed." They do not recommend any alteration in the registration and police supervision, the periodical examination of the prostitutes, or the detention in hospital of those who are diseased. They recommend that in some of the unsubjected districts female lock hospitals should be established; additional powers be given to the police to enter houses of ill-fame for the purpose of taking steps to diminish prostitution; and also powers to institute proceedings for the prosecution of brothel-keepers; that it should be a misdemeanour for any person to receive into a house any girl under sixteen years of age for an immoral purpose; and that police magistrates should have power to grant a search warrant in cases where there is good reason to believe this has been done, and to commit for trial any person committing such an offence.

The evidence taken before the Committee, and on which the Report is founded, will be published in due course, and will no doubt bear out their recommendations. In the meantime we can only say that the Report itself affords sufficient proof of the care with which the inquiry has been conducted, and the impartial consideration which has been given to the various important points involved in the question under investigation. The conclusion at which the Committee have arrived, in favour of the maintenance of the Contagious Diseases Acts, must commend itself to every one who has any knowledge of the widespread prevalence of venereal disease in our garrison towns and sea-ports, and of its injurious effects upon the health of the population.

MODERN pathology has proved beyond question that oxidation processes in the body are increased during pyrexia. The increase in the most important product of oxidation, carbonic acid, has long been known; but the corresponding increase in the amount of oxygen taken in has only lately been proved by LILIENFELD and PINKLER. Further steps in the investigation are necessary to determine the organ in which the increased process of combustion occurs, and the manner in which it takes place. Hitherto, on these subjects, we have only more or less probable hypotheses. According to a recent statement by Professor ZUNTZ, of Berlin, the facts known are susceptible of two explanations. The increased metabolism of pyrexia may occur in consequence of the presence of a ferment-like substance in the blood, which causes a destruction of the elements of the blood and tissues. So far as micro-organisms have been discovered to be the pathological cause of many fevers, the interchange of material involved in the growth and multiplication of these parasites may be the source of the increased interchange of material in these diseases. The second hypothesis is that the interchange of material is conditioned through the nervous apparatus, on which the pyrogenic irritant exerts its primary action, and through which the interchange of material is increased in one or in many organs. Since the chief part of the oxygen comes from the muscles, and the amount of oxidation is certainly determined in them by nervous influences, the question arises, in connexion with this second hypothesis, whether an increased innervation of the voluntary muscles is not the cause, alone or combined with other influences, of the increased metabolism of fever. The explanation derives support from the rigor at the commencement, and the strong sense of muscular fatigue which attends the entire course of fever.

To obtain further evidence on the question, and so to endeavour to decide between the two above-named hypotheses, it appeared desirable to cut off the influence of the nervous system from the muscles by means of curara. If the increased metabolism is produced by the direct action of a ferment on the blood or tissues, or if it is merely due to the growth of bacteria, or if it is produced, as some think, through vaso-motor influences, it would occur after a feeble dose of good curara, which leaves heart and vessels intact, just as in normal animals, and would then be all the more significant because the metabolism is lowered in a curarised animal. ZUNTZ has endeavoured to solve this problem by keeping the animal in a bath of uniform temperature in connexion with an apparatus which permitted a careful collection and estimation of the amount of exhaled carbonic acid. The animals were then exposed to a pyrogenic agent, which in a normal animal caused a brisk pyrexia, with a corresponding increase in the gaseous absorption and excretion. Under the influence of curara, however, the amount of oxygen absorbed, and, as far as could be ascertained, that of carbonic acid eliminated, remained constant.

ZUNTZ admits that a negative result can only be allowed weight when the number of experiments has been large, but to it he has found hitherto no exception. Nor was there any exception to the uniformity with which febrile disturbance was produced in the control experiments by the pyrogenic substance injected. At first a decomposing infusion of hay was used, but in a subsequent series, for greater certainty, he inoculated the animals with blood from one recently dead from the septicæmia described by GAFFKY. He satisfied himself by experiment with the accuracy of GAFFKY'S statement that this virus causes, almost with certainty, the temperature to rise about eight hours after the injection, and that a few hours later a temperature of 105·5° F. is attained. In only a few instances among a large number of rabbits experimented on was the elevation of temperature slight and transient, although the microscopical examination of the blood showed the presence of the specific organisms, and death occurred in the course of forty-eight hours. With full consciousness of these possibilities of error, ZUNTZ believes that the number of experiments is now such that he can affirm the important fact that the one and only cause of the increase of oxidation processes in the body which occur in fever is dependent on the muscular innervation. Is, therefore, curara to take the place of the cold bath in hyperpyrexia?

Annotations.

"Ne quid nimis."

THE BRITISH MEDICAL ASSOCIATION.

THE jubilee meeting of the British Medical Association that has just been celebrated may prove to be memorable in many ways in the history of the Association. From all accounts it was one of the most pleasant gatherings that have taken place (although by no means the largest in point of numbers); and the interesting and beautiful district in which the members assembled was as much appreciated as the hospitality which the professional and municipal authorities of Worcester so lavishly bestowed. Of the actual gains to science accruing from this meeting it is not possible to speak with certainty; the sections were numerous, and in many of them subjects of wide interest were discussed in a more or less exhaustive manner. It has been said with truth that in such meetings there is too pretentious a programme attempted, and that the majority of the members subordinate the scientific labours to the opportunities afforded them of gaining an insight into the characterisitic features of the district in which the meeting is held, its manufactures, its arts, and its natural beauties. There is so much to see and learn that is of wide human interest that comparatively few care to pay attention to the purely scientific work, which is the real *raison d'être* of the gathering. It might be well if the sectional work were more limited, and the opportunity seized for the consideration of a few special subjects, rather than for attempts to be made to secure a long list of communications, which are either doomed not to be read, or, if read, to be inadequately discussed. In his speech at the annual dinner, when proposing the toast of "Success to the British Medical Association," Sir James Paget dwelt largely upon the scientific work of the Association, as being the most important of its functions, and the one in which the greatest advances had been made, and he evidently desired to convey the impression that by a continued adherence to scientific investigations the Association would be doing work which ultimately would prove of greater advantage than by pursuing its political functions at the expense of science. The same spirit pervaded some of the addresses delivered by the presidents of sections, notably that of Dr. Allbutt in Medicine, of Professor Humphry in Anatomy, and Dr. Hughlings Jackson in Pathology, and certainly one of the greatest advantages of these gatherings is that the members can hear from men who have attained high positions by their own devotion to science, the underlying principles of scientific medicine. The general addresses were all pitched in the right key, and, as was fitting, each of the orators in turn indulged in retrospection, and in a certain amount of forecast. Dr. Strange, the President, in his able opening address, fearlessly pointed out the besetting evils of the present day, and did well to speak out plainly upon matters in which the honour and dignity of the profession are so vitally concerned. The reports of the committees that may be specially alluded to were that of the Scientific Grants Committee and that on Collective Investigation. In both these directions the Association is doing well to expend a portion of its funds. The work of collective investigation has practically only just commenced; but before the next annual meeting it is believed that the committee will be in possession of facts which will enable them to see how this useful work is really taken up by country practitioners. So far it promises well; and if energy and zeal on the part of its secretary be met by a like spirit among the profession generally the undertaking may prove to be the most valuable of any that the Association has yet ventured upon. It is, perhaps, hardly to be expected that in so large a body perfect harmony should reign; and there is undoubtedly a growing discontent amongst the general body of members with the central management. This feeling managed to find expression on two occasions at Worcester, and Dr. Ward Cousins' motion respecting the *Journal* and Finance Committee received a certain amount of support. The growth of the Association of late years will only prove advantageous to it if the leading members, those in whom the conduct of the Association rests, are mindful of the interests of the profession, and the action of the Parliamentary Bills Committee with respect to legislation for the compulsory notification of disease shows how easy it is for them to put themselves into collision with the body of the profession. For although, theoretically, the Committee of Council is representative of all the branches, it is well known that the actual working members of that committee consist of a few whose time, duties, and places of residence enable them to attend its meetings. The wider, then, the Association extends its limits the greater will be the demand for securing a thorough representation on its governing body of all its branches; and, unless those at present in authority exert themselves to satisfy this desire, the opposition to the present *régime* will grow to such an extent as to be disastrous to that harmony which alone can maintain the Association in the position it ought to occupy. Therefore this Worcester meeting may prove to be, in more senses than one, a landmark in the Association's history, and the next few years may witness the inauguration of changes of the greatest moment in its constitution.

THE PRESIDENT'S ADDRESS AND THE LATE MR. WAKLEY.

AN old and esteemed correspondent writes:—The learned President of the British Medical Association can hardly be complimented on his choice of simile at that point of his address at which he speaks of the first days of THE LANCET. When he describes a weasel or polecat biting, scratching, and driving out bats, he gives us a picture of the habits of those animals which dear old Goldsmith himself would hardly have dared to introduce into "Natural History"; and when he describes these animals as engaged in hanging up the bats like vermin on a barn door, natural history altogether lapses into such fable as "Alice in Wonderland" might very much like to work into a new edition. Dr. Strange, however, may be forgiven this, and a great deal more, for the kind manner in which he has spoken of the founder, the projector, and for so many years the Editor of THE LANCET, the late Mr. Thomas Wakley. Dr. Strange says, the services which that journal, after it had conquered its own independence, rendered to medicine, was simply incalculable. Monopolies destroyed; hole-and-corner meetings and doings of the corporations, for the benefit of the few to the detriment and exclusion of the many, exposed; pompous ignorance and overbearing imbecility held up to scorn; the oppressed and obscure, but honest and industrious, seeker after truth brought to the front; the attack on the Legislature, its apathy towards all that concerned the interest of our profession, its tolerance of abominable monopolies and abuses in high places; the farce of the Coroner's Court; the winking at the adulteration of the food of the people; the inhuman neglect of the sick poor; the disregard of all decency in the burial of the dead; —these abuses, said the President, were one by one attacked and their authors and abettors lashed with a pitiless and unsparing hand, until redress and reform were grudgingly conceded. To these kind, and it may, with perfect truth, be said honest recognitions, others might have been added. For example, there was nothing so grateful to the founder of THE LANCET as the recognition of the service which he rendered to the British soldier. The writer of this note sat some

quarter of a century ago by the side of Mr. Wakley in a crowded assembly. A distinguished literary man of the time had interrupted the conversation for a moment by a congratulatory word to the Coroner for Middlesex in respect to his services in suppressing the brutal practice of flogging, literally to death sometimes, men belonging to the army service; and when we resumed our talk the first word uttered by Mr. Wakley was to the effect that he had rendered no public service for which he hoped to be so much remembered. Dr. Strange, in a further recollection of the past, draws a contrast between the founder of THE LANCET and the founder and editor of the once famous *Medico-Chirurgical Review*, Dr. (afterwards Sir John) Forbes. The contrast is, no doubt, a striking one. Mr. Wakley was all verve, action, fire; Dr. Forbes was all quietude, repose, reflection. Mr. Wakley was from the beginning to the end of his career constructive; Dr. Forbes from the beginning to the end of his career was analytical. Mr. Wakley was a leader writer; Dr. Forbes was a reviewer. Mr. Wakley did not wait for men to finish writing what was foolish or mischievous, he attacked them while they were at it; Dr. Forbes waited until they committed themselves to paper, and then tore them to pieces if he did not agree with them, with a skill and deliberateness which had few parallels. Mr. Wakley's genius lay in comprehending the present, that which was before him, and in discriminating between the good and the bad as it existed at the time; Dr. Forbes' genius consisted of insight, detection of concealed difficulties, and foresight of changes and difficulties that were to come. Mr. Wakley, though severest of severe critics in public work, was gentle in nature, essentially good tempered, and never put out, whatever might occur. He slept annoyances down. Dr. Forbes was of a quiet nature too, but with a certain irritability which he could not repress, and a weariness he could not conceal. At the same time both men had much that was in common. Both had this admirable trait, that they were considerate for all men younger than themselves whom they had learned to appreciate. Both had the happy faculty of distinguishing the working men from the drones; the real men from the pretenders. Both had energy, endurance, courage, perseverance, and each in his respective way loved nothing so well as the profession which it was their part to raise to a nobler standpoint, a more useful service, and a more befitting position than it had ever attained in English history.

The journal founded and edited by Sir John Forbes has for some years ceased to exist, failing to meet the current want or current tastes: a fact which everyone must regret; for the tone of the *Review* was classical, practical, cultivated, and perhaps, after all, required nothing more than the hand of its projector to keep it alive. The momentum given to THE LANCET by Mr. Wakley is still felt through every column of the journal, which now commands a larger circle of readers, both professional and lay, than he ever addressed. The spirit in which he conducted it is religiously, it may be said filially, preserved under the present Editor, who has the gratification of seeing its influence extending, its size having been amplified threefold, and its services as the leading medical and sanitary power acknowledged throughout every English-speaking community in the civilised world.

GUY'S HOSPITAL AND CRITICAL CASES.

OUR readers are aware of the circumstances of the refusal of the house-surgeon of Guy's Hospital to retain or admit John Tyson, found by him among the out-patients to be labouring under small-pox. It is to be regretted that after detecting so grave a disease the resident medical officer, though we admit the limitation of his powers, did not retain the man in some isolated place, or send him in a cab—with instructions for its disinfection to follow—to Stockwell. After he was dismissed, Tyson got into an omnibus and went to Stockwell, thereby breaking the law by exposing himself while knowing himself to be labouring under infectious disease. These facts have been under the consideration of a Committee of the Metropolitan Asylums Board. One or two members of the Board thought the hospital authorities deserving of censure. But the Board has contented itself with arriving at one or two practical resolutions—viz., that every hospital should have an isolation room in which to place a doubtful case; secondly, that it be recommended to the Local Government Board that patients be received at the Metropolitan Asylums Hospitals on the certificate of the resident medical officer of any of the London hospitals. We ourselves have carefully pointed out the necessity for these and other changes in connexion with this painful case. The fact is, that the whole arrangements for the conveyance of the infectious sick, and of the sick and wounded generally, are very clumsy and circuitous. We want an ambulance system in London similar to that which they have in New York, where, by ringing a bell, an ambulance apparatus from any hospital can be secured in a few minutes.

THE EGYPTIAN EXPEDITION.

THE greater number of medical officers and the Field Hospitals have now embarked for Alexandria, the 2nd Bearer Company, under the charge of Surgeon-Major O'Dwyer, with Surgeon-Major J. Walker, Surgeons R. V. Ash, B. Connolly, A. Harding, P. Connolly, E. D. Farmer, R. C. Laffan, Lieutenants of Orderlies D. O'Connor and Tighe, and 143 non-commissioned officers and men of the Army Hospital Corps left Portsmouth in the *City of Paris* and *Texas* on Saturday last.

Surgeon-Majors R. P. Fergusson and W. Cairns left the Albert Docks on Monday, in charge of the troops on board the *Lydian Monarch* for Alexandria.

Deputy Surgeon J. J. Clark, Bengal Medical Service, proceeds with the force from Bengal to Egypt in charge of the 1st Division.

Surgeon J. C. Dowman has proceeded to Egypt in the *Adjutant*, which left the Albert Docks on the 17th inst.

The steamship *Courland* has been placed at the disposal of the medical authorities by the Admiralty for service as tender to the hospital ship *Carthage;* she will be fitted with cots to accommodate thirty sick and wounded and is now on her way to Cyprus, where the depôt of the Army Hospital Corps will be formed, and which will be constituted an important base and reserve. Deputy Surgeon J. Lamprey will superintendent the medical arrangements on the island.

"THE COSTLINESS OF MEDICAL WORKS."

DR. BARRON, of Southport, whose letter appeared in our last issue, enters a strong, and perhaps not wholly groundless, protest against the costliness of medical works. He regrets, and doubtless every one of his readers will join him in deploring, the fact that because medical works are, as a rule, expensive they are not extensively purchased, and probably not generally read. The medical libraries do something to circulate works on medical and surgical subjects among the profession; but it is notorious that practitioners do not, as a rule, possess large collections of the volumes published for their enlightenment. We confess that our own view of this matter is not precisely that taken by our correspondent. We admit that the high prices charged for professional works may, and doubtless do, to some extent, limit their sale, but we doubt whether the total number of books sold would be greatly increased if their cost were even considerably less. It is impossible to disguise the fact that the medical calling is one which makes a proportionally larger

demand on the mental attention of its members than almost any other. The busy practitioner finds his time very fully occupied, and the few occasional moments of leisure from actual clinical business which he can command scarcely suffice for the study of such reports of cases, reprints of papers read and discussions taking place at the Societies as appear in the medical periodicals, and those special works which, so to say, force themselves—whether cheap or costly—into every medical man's book-room. If, which rarely happens, the practitioner has spare time on his hands, he is likely to follow the bent of a cultivated taste, and find pleasure in the perusal of ordinary literature. Although we would not be misunderstood in this respect, we doubt whether it is not one of the needs of the social epoch as regards the status and popularity of the profession that even greater attention than is now commonly devoted to general literature should be so bestowed. It is notorious that medical men are apt to be single-barreled in their conversational powers, because they have little or no time to read or think on other than their own technical topics. Practically this gives them too distinctive a character in society. It is not as a rule possible instantly to recognise the barrister or the clergyman, unless the latter persists in the ridiculous custom of going about marked by the cut of his clothes. It is, however, almost invariably possible to spot the medical practitioner in any social gathering, because he looks and talks "shop" in default of being *au courant* with other subjects, except as they may be incidentally touched from his own standpoint. We are, therefore, less desirous that medical men should be further burdened with their own particular literature than that they should be able to find time and inclination to make frequent excursions beyond its special province. For the rest, it need only be urged that medical books are, as a rule, more costly to publish than other works, and because the sale is very limited the price is high. Standard or classical—in a word, necessary—works may be issued at low prices, but the bulk of medical books cannot be published cheaply unless authors are prepared to lose heavily by their issue. The only recompense for such a sacrifice would be extension of personal popularity and increase of practice; and it is the special desire of the profession just now to discourage as far as possible the publication and sale of works which are practically advertisements. The question raised is one that needs to be looked at all round.

VASO-CONSTRICTOR NERVES.

AN elaborate study of the sympathetic nerves which cause the dilatation of the vessels of the mouth and lips has been made by MM. Dastre and Morat. Two years ago they announced the discovery, in the cervical trunk of the sympathetic, of filaments, the function of which is to cause dilatation of the vessels of one region of the head, and thus to antagonise the action of the other fibres of the sympathetic. If the spinal cord is divided in the lower part of the neck, stimulation of the posterior segment causes a primary dilatation of the vessels of a large part of the head, especially in the region of the ear and of the mucous membrane and skin of the nose and mouth. The result is the same in the cat, rabbit, hare, and dog, and seems to show that vaso-dilator nerves arise from this part of the spinal cord. If the dorsal nerves from the second to the fifth are exposed, divided, and the peripheral ends are stimulated, dilatation of vessels occurs, but in a limited region of the mouth and face, and only in the dog. The result only follows stimulation of the anterior roots. Hence, in this animal at any rate, the vaso-dilator nerves seem to leave the cord by this path. A similar experiment with the branches from these roots to the sympathetic gives the same result and conclusion, and may, in like manner, be followed up the cervical sympathetic trunk. Many fibres were traced by the experimental method into the fifth nerve. The course of the nerves being thus ascertained, an attempt was made to excite them by an agent less artificial than electricity. Asphyxial blood is a powerful stimulant to the central nervous system, but it stimulates both classes of vascular nerves, and one or the other effect may predominate. In the bucco-facial region the effect of asphyxia is congestion. If the sympathetic is divided on one side, the congestion is much slighter, sometimes is absent. Hence the asphyxial vascular dilatation must be due, in part at least, to the influence of these sympathetic fibres. A dilator action may also be excited by reflex influences. Stimulation of the central extremity of the divided vagus, isolated from the sympathetic in the lower part of the neck, causes a primary and bilateral dilatation, which is lessened or prevented by preceding division of the sympathetic. It is also prevented if complete muscular relaxation is produced by the inhalation of chloroform, or if the spinal cord has been divided. It is especially considerable if the stimulation is applied to the superior laryngeal nerve, or to the trunk of the vagus, as far as the origin of the pulmonary branches, but is almost absent when the stimulation is below this point. Bucco-facial congestion may also be produced by excitation of the central end of the sciatic or of the tibial nerve, and probably also of other cutaneous branches. A certain degree of congestion is produced by asphyxia, and by reflex excitation, after the division of the sympathetic; and when sufficient time has elapsed to permit the degeneration of the nerve fibres, stimulation of the superior maxillary nerve still causes a certain degree of congestion of the corresponding lip. Hence the cervical sympathetic appears not to contain all the vaso-dilator nerves of this region. In this respect the dilator nerves of the vessels resemble the dilator nerves of the iris, which run in part only in the sympathetic trunk.

THE DROWNING SEASON.

THE season of deaths by drowning has arrived, and it has been most painfully signalised this year by the untimely death of a distinguished man, who was as greatly respected as he was widely known. Professor Jevons stood on the verge of a great philosophic success when he met his death under circumstances peculiarly painful to his family and his friends. He went out to bathe in perfect health and spirits, and his body was found a few hours afterwards, life being totally extinct. It is not much use in a case like this to ask whether the deceased over-estimated his powers as a swimmer, or did not realise the special risks of the coast. There is always danger in bathing. On the sands at Boulogne the tide may come in suddenly, and sweep away the machines. At any one of our English watering-places an under-current may throw the most cautious bather and carry him out of his depth. If it be cold a man may get cramp. If it be hot he may be suddenly attacked with apoplexy, or be struck down with sunstroke. The perils of the sea are many and ever present. There is only one policy of self-protection, and that, unfortunately, the majority of persons will not adopt. The use of a swimming collar, or waist belt, or any other contrivance which might help to keep the head above water in a moment of danger, and so preserve the wearer from drowning until assistance arrived, is considered beneath the dignity of anyone who ventures into the water. Want of moral courage to take proper precaution lies at the root of most personal "accidents." It is very little, if any, use to offer this remark, because even those who acknowledge its accuracy will not be practically impressed by it. We can only lament these sacrifices of life to the passion of independence. The death of Professor Jevons will cause widespread

regret, and in a certain melancholy way it may help for the moment to emphasise the warning which year by year it is our wont to give.

HEALTH OF THE PRINCE OF WALES.

THE facts concerning the health of the Prince of Wales, recently commented upon, are simple, and it is well that they should be stated simply. His Royal Highness has had a great deal of work lately, and, like other men who are somewhat jaded, he has been recommended to embrace the opportunity offered by the season and family arrangements to visit a pleasant locality, and while there to do as the rest of the visitors will do—that is, "take the waters." The change of scene and climate, the rest, and such modifications in his mode of life as are necessitated by the sojourn at a German bath, will, it is hoped and believed, be of service to His Royal Highness. There is really no more to be said about the matter, except to express the loyal wish that the "treatment"—if treatment this can be called—may be successful. The Prince leads a life which is exhausting, and he needs rest. That rest may be enjoyed where he is going, and, in all human probability, his Royal Highness will enter upon his autumnal sports all the better for the preliminary trip he is about to take.

HOMŒOPATHY AND THE BRITISH MEDICAL ASSOCIATION.

THE authorities of the British Medical Association may congratulate themselves on escaping so easily from an embarrassing position in reference to the question of homœopathy. The injudicious allusions to it last year by Dr. Bristowe and Mr. Hutchinson respectively, by mutual understanding and with the concurrence of the Council, placed the Association in a very painful position. It was not to be supposed for a moment that a great medical Association, having the same opinion and the same laws, in regard to homœopathy, held and practised by scientific medical men all over the world, could quietly let pass such advice as was administered to it by gentlemen who only looked on the subject from an academic and benevolent point of view. It is not *now* — when homœopathy is extinct; when the real disciples of Hahnemann in England can be counted on one's fingers; when these say that homœopathy is no longer taught, even in the School of Homœopathy; when the contempt and denunciation of homœopathy have received their triumphant vindication — that a great medical Association should have been asked to show any quarter to medical men who still either believe in the exploded nonsense or trade on the belief of non-medical persons who do so. But this was the suggestion of the authors of the address in Surgery and the address in Medicine last year. And when the members of the Association would naturally have risen to protest, they were given to understand it would not be courteous to express their dissent then and there. Many significant indications have been given to the Council that the members of the Association would not allow themselves twice to be found in such a childish and false position. It is not one of the notes of liberal profession to tolerate either false principles or those who trade on them. Accordingly, the Council, in its report at the recent meeting, dealt boldly and candidly with the members on the subject, and announced rules which will make it impossible for a homœopath henceforth to become a member of the Association. Mr. Nelson Hardy wished to go further. He wished to so alter the resolution adopting the report as to secure that the avowal of a belief in homœopathy, or of any other designation implying a special mode of treatment, should *ipso facto* disqualify for membership of the Association. The Association was content to be assured that the new rules would henceforth exclude all homœopaths. If any homœopath now chooses to remain a member, he may; but his sense of dignity will be a subject for the study of his fellow members. Here this question will end for the present. There is only one way in which gentlemen now using the title and the shibboleths of Hahnemann can be admitted to Medical Societies, and that is by ceasing to use them. It is they who raise the the sect and import narrowness into medicine. It is they who exclude themselves. They would not be owned even by Hahnemann. They have abandoned the fundamental points of his faith and practice. Let them act candidly with th public and abandon a name which misleads it, and they will find no want of magnanimity in the profession to which they return.

DWELLINGS OF THE POOR.

POLITICAL exigencies have hitherto intervened to prevent the present Government following the example set by their predecessors in matters of sanitary reform. The Bill, however, dealing with the question of artisans' dwellings, which has just received the assent of the Queen, is a piece of domestic legislation which is likely to be attended with beneficial and important results. The Act of 1875, introduced by Sir Richard Cross, has not worked so efficiently as was expected, owing to its being hampered with the regulation requiring that the whole population displaced should be provided with accommodation within the same area. The present Bill affords relief in this respect, since accommodation for only one-half the population displaced need now be provided. This will considerably lessen the cost to the ratepayers—a consideration which has hitherto prevented improvements being carried out as extensively as was contemplated. There is one provision in the new Bill, however, which, we fear, will require to be reconsidered. Formerly all expenses connected with putting the Act in operation has been borne by the Metropolitan Board of Works; now, when areas containing less than ten houses have to be dealt with, the expenses are to fall upon the local rates. There can be little doubt that many districts are too poor to expend the necessary sums, and these districts will be found to be generally those in which nests of objectionable tenements abound; the expenses therefore entailed on these parishes would be out of all proportion to the rates required from the general population of the metropolis. It seems only fair that the expenses of improvements intended to benefit the whole community should be equally distributed. If the wealthy inhabitants of the West-end wish to diminish the risk of zymotic disease being imported to their mansions, they must see that the dwellings of their poorer neighbours are maintained in a wholesome condition in less wealthy and fashionable districts, and expect to pay a fair share for the protection afforded. The Bill, however, will give a considerable impetus to the improvements already in progress, and with the erection of dwellings of a superior order in the metropolis, together with the facilities afforded by the railways for those whose avocations permit them to go a little way out of town for cheap and decent quarters, it is to be hoped that the artisan class will soon be provided with ampler accommodation, and that the terrible injury both to health and morals which overcrowding, together with insanitary and squalid surroundings, engender, will gradually diminish and finally become extinct. But although hopeful for the future with regard to the house accommodation of the artisan class, we fear the Bill will fail to benefit the very poor. When the present rookeries and alleys in which they now herd are swept away, where are they to find a refuge? The rent of rooms in the buildings which replace them will, we fear, be too costly for them, and they will crowd together more closely in the dens that remain. It will be a source of

but little satisfaction if, after considerable expense, we find that we have given one class more elbow-room at the expense of another. It is to be hoped that those who have charge of the carrying out of the Artisan and Suburban Dwellings Acts will not be too ambitious in their schemes, but will bear in mind the needs and requirements of the very poor. In fact, they should be the first consideration. The mechanic with his regular wages and tolerably sure employment, would not, as a rule, find it difficult to arrange to live in the suburbs, but to the very poor, whose wages are scanty and often very precarious, such a proceeding would be impossible.

RIDER'S SPRAIN.

WE have recently had attention drawn in our columns to an accident not infrequent in the hunting field and among riders, the true nature of which has not hitherto been pointed out, while its treatment has for the most part remained entirely in the hands of the surgical instrument maker. Everyone not constantly taking horse exercise is well aware of the strain upon the adductor muscles that "gripping" a horse occasions. This strain leads to pain and tenderness along the inner side of the thigh and over the tendon of the adductor longus in particular. This is occasioned by the prolonged and unaccustomed use of this group of muscles. If during hunting or riding, from some movement of the horse, a sudden and severe strain is thrown upon these muscles, the adductor longus is apt to yield, and a rent occurs in it just where the narrow tendon joins the expanding muscular tissue. The immediate symptom is severe pain in the part with or without a sensation of a snap, and inability to maintain one's "seat." The torn bloodvessels pour out blood, and an extensive bruise or even a blood tumour may result. The treatment consists in rest and such applications as will most quickly lead to absorption of the effused blood and healing of the breach in the muscle. Equable pressure fulfils these aims, but some would prefer the previous application of cold to the part. Subsequently some means of applying firm pressure along the upper and inner part of the thigh is necessary during horse exercise. This allows the contraction of the adductor muscles without pain or a sense of weakness. For the purpose special appliances are manufactured, but riders have found a not inefficient substitute in a girth or stirrup leather. The accident is stated to be more common in civil than in military life, and in different cases it varies very much in degree, in some a great part or the whole of the muscle being torn, in others only a few of its fibres.

MONSTROSITIES IN THE PUBLIC STREETS.

A CORRESPONDENT asks if there is any Act of Parliament which prohibits the parade of monstrosities and deformities in the public streets. Unfortunately there is not. Such an Act is much needed. Great harm may be done by the exhibition of revolting spectacles to the general community. We can only express our regret that there should be no law capable of being applied to the mitigation of the nuisance of which he complains. Not only are many of the pitiable objects to be seen in the streets of London and other large cities hideous and sickening; they cannot be witnessed without the production of an impression on the nervous system which is likely enough to be mischievous. In certain cases, not only may the individual suddenly be brought under the influence of such an impression, and be injuriously affected, but, by the operation of well-known laws of development, the very monstrosity or deformity reflected on the sensorium may be reproduced in another generation, passing from mother to unborn child. This is a matter of considerable moment, and should help to draw the attention of public authorities to the need of a prohibitory law.

PROFESSOR ESMARCH ON THE CASE OF PRESIDENT GARFIELD.

PROFESSOR ESMARCH delivered a lecture on the treatment of President Garfield's wound before the Physiological Society of Kiel in February last. This lecture he has now printed and circulated, and it is impossible that the views of a surgeon so accomplished and so worthy of expressing an opinion on such a case should not be canvassed. The facts of the case are first of all clearly and fairly stated from Dr. Bliss's own published accounts of the progress of the case and of the post-mortem examination. Professor Esmarch's conclusions are (1) that the wound was not in itself absolutely fatal; (2) that the bullet was not the cause of the septic suppuration in the wound which led to the fatal result; (3) that the cause of the septic suppuration was introduced from without, and that as contributing directly or indirectly to this were the following errors in the treatment—the repeated probing and examination of the wound with instruments and fingers not rendered aseptic, the failure to dress the wound aseptically, the syringing out of the wound with fluids not sufficiently antiseptic, and the failure to give a complete vent to the "bagging" pus; (4) there was no true pyæmia, but only metastatic inflammation of the parotid gland; (5) the cause of death was hæmorrhage, moderate in amount, but occurring in one whose strength was undermined by septic fever, decubitus, bronchial catarrh, and hypostatic pneumonia; (6) although the splenic artery may have been injured primarily by the bullet, or by a splinter of bone, this would not have led to the formation of a false aneurism except for the establishment of putrid suppuration. In conclusion, Professor Esmarch refers to the popular superstition that the bullet is the cause of all danger in a gunshot wound, and that to extract the bullet should be the chief aim of the surgeon. He asserts that most of the secondary dangers arise rather from the fingers of those who explore the wound, and that the American surgeons committed the error of doing too much rather than of doing too little, as they have been freely accused of at home. Finally, he surmises that if no search had been made for the ball, and the wound had been dressed aseptically, the unfortunate patient would have been alive now. Valuable as is Prof. Esmarch's opinion on such a point, we regret that this lecture has been published, at any rate so soon. It would not have lost in value by being kept back until the acrimonious discussions on the conduct of the attending surgeons had died out on the other side of the Atlantic. It is proverbially easy to be wise after the event, and it is an ungracious task to criticise adversely the conduct of men who, under very trying circumstances, were suddenly called upon to act in a grave emergency. We are willing to admit that mistakes may have been committed, but it is a case in which the golden rule is eminently applicable: "Let him that is without sin first cast a stone."

GASTRIC ULCER.

IN the course of some experiments on the production of nephritis by the injection of cantharidin under the skin, Aufrecht has made the remarkable discovery that ulceration of the stomach may result from these injections. After the subcutaneous injection of cantharidin, suspended in oil to lessen the local irritation, he found in guinea-pigs a large number of circumscribed changes in the mucous membrane of the stomach. These were at first regarded as merely hæmorrhages, but on closer examination were found to be spots of loss of substance, the boundary of which projected above the level of the adjacent mucous membrane. These changes were especially conspicuous in the stomach of a rabbit, which died ten days after the injection of two and a half milligrammes of cantharidin. About fifteen small

ulcers were found in the stomach, many of them with raised edges, and all filled with blood-clot. There were also six circular spots of a dull grey colour, sharply limited, without any extravasation. A microscopical examination showed in the latter the following changes. The epithelium of the glands was paler and less granular than normal. Between the glands was a clear amorphous material; the capillaries were distended with blood, whereas, elsewhere, they were empty. A similar change was found in the vicinity of the extravasations, and the glandular epithelium here presented irregularity. The extravasations were of uniform brownish-red blood, in which no intact blood-corpuscles could be seen. There was no sharp limitation to the blood effused, such as might have been expected had the hæmorrhage resulted from the rupture of one vessel. From these facts he concludes that the extravasation is the second stage in the process, consecutive to inflammation, which appears to be the first alteration. Aufrecht believes that these facts indicate that in man a similar sequence may obtain, and that ulcer of the stomach probably commences as inflammation, and not, as is commonly assumed, by hæmorrhage.

ISOLATION HOSPITAL FOR RAMSGATE.

FROM the last report of the proceedings of the Ramsgate Improvement Commissioners, we fear that this body is about to take a retrograde step. Some years ago the Commissioners joined Margate and Broadstairs in erecting a hospital for infectious diseases, but they unfortunately delayed action too long, and a temporary wooden structure was hurriedly put up in face of an epidemic of small-pox. The building, though a good one, has long been found ill adapted to many purposes to which such a hospital may be put at a seaside resort, and complaints have been made as to the lack of accommodation available. Hence for some two years or more a permanent extension has been talked of, and a joint hospital committee appear to have done their best to carry it through. After many delays the scheme has come before a Ramsgate committee, and their report, which shelves the question, has been adopted by the Commissioners. The grounds for this unfortunate proceeding are in some respects curious. The extension is regarded as "hazardous and inopportune." With regard to its being hazardous, we find the chairman of the Ramsgate committee explaining that temporary buildings could be erected if an epidemic broke out in the town. We certainly fail to understand what is here meant. If infectious hospitals ever do harm to their immediate neighbourhood, and are hence hazardous, it is when large numbers of patients are aggregated together; and the chairman, if correctly reported, instead of proposing the erection of a building containing a small number of beds in which to isolate a few attacks, and so to prevent an epidemic, would literally wait till the epidemic is prevalent, and then attempt to deal with the large number of patients which previous neglect of isolation will have rendered possible; thus risk of danger, if any exists, is courted. How this scheme can be inopportune we also fail, from a medical point of view, to see. Medical men have at times hardly known what to do in order to secure the isolation needed for these prosperous Kent coast watering-places, and yet the remedy is again postponed. The district in question ought also to have had sufficient experience of temporary buildings, for those at first erected were not ready to deal with the epidemic which led to their construction; and we would warn Ramsgate against further procrastination in this matter, which may at any moment be of vital importance in so far as its first interests are concerned. The town is stated to be at present remarkably free from infectious disease, and there is plenty of room at the hospital; but the reverse has been the case, and may be so again.

THE FOURTH INTERNATIONAL SANITARY CONGRESS.

THE first international congress of sanitary reformers was held, it will be remembered, some eight years ago at Brussels, the King of the Belgians presiding. The second congress met at Paris, under the patronage of the French Government, during the Universal Exhibition of 1878. It was a most brilliant gathering of some five hundred adherents representing eighteen nationalities. They met at the Palace of the Trocadero, and subsequent results have proved that the debates were not futile in producing practical improvements. The third congress, held at Turin in 1880, was also a great success. The Italian Government lent its aid, the King of Italy in person attended at some of the meetings. And now the fourth congress will be held at Geneva, from the 4th to the 9th of September, together with an exhibition of sanitary appliances from the 1st to the 15th, in the large military buildings of the Plain Palais. The programme of the congress, with a synopsis of the opening speeches of each section, has already been published in pamphlet form, and notification of adherence, together with a subscription of twenty francs, should be sent before August 31st to Doctor P. L. Durrant, 4, Rue Pinto, St. Pierre, Geneva. In exchange for this modest subscription, a printed and elaborate report of the proceedings of the congress will be received, and its members benefit by the arrangements made with the Swiss, Italian, and French railways. Delegates from England, we understand, will, while paying full fare to Geneva, receive a free return ticket from Geneva to Calais. The organising committee will, if required, secure rooms for visitors. The Congress is to be held at the Geneva University, and there will be a club room at the disposal of the members for writing and receiving letters, &c. Excursions on the lake of Geneva have been organised, and there will be no lack of those usual festivities that enliven gatherings of this description. We will give a summary, on a future occasion, of the subjects selected for discussion, and, perhaps, as this is a tempting season for a visit to Geneva, England may be more fully represented than at previous International Congresses. The majority of adherents are, of course, medical men, but all whose scientific studies are connected with the preservation of public health are welcome, and this includes architects and sanitary engineers.

"DOUBLE SUICIDES."

A VERY important question is raised, or rather revived, by the occurrence of "double suicides;" of which we have recently had a conspicuous example. When two persons conspire together to kill each other, or to destroy their several lives simultaneously—it matters not which of the two forms of resolution may be adopted—it is simply absurd to suppose they are insane. The penalties entailed by a verdict of *felo de se* are, however, so revolting, that juries make ridiculous returns rather than bring in a proper verdict. It is not impossible, but it is in the last degree unlikely that a case of double suicide should have been one of double insanity. The only way this could happen would be by the morbid influence of one mind on another anterior to the commission of the act. There may be such cases, but they are so rare as to render it unreasonable to take the bare probability into account. Some years ago a case was reported in which two members of the same family became insane on the same subject, and for a considerable time played into each other's hands in the matter of a common delusion as to rank. There is, of course, no psychological reason why these two lunatics might not have conspired to kill themselves, but the conjunction of mind and purpose is extremely unlikely to have taken place. In making this remark we are not unmindful of the cases of double insanity and double suicide which have

been recorded. A closer scrutiny of the last-mentioned class of cases would probably lead to their more precise classification as instances of murder and suicide. However this may be, it is time that the law which induces juries to regard almost every case of suicide as one of insanity should be repealed. It is a disgrace to our statute-book, a perpetual offence to the common sense of the community, and of no deterrent influence as regards the crime of self-murder, because it is practically sure to be evaded.

CONTAGIOUS DISEASES ACTS.

THE annual report by the Assistant Commissioner of Police on the operation of the Contagious Diseases Acts during the year 1881 appears opportunely, just as the report of the Select Committee on the subject is attracting attention. The results for the year are very satisfactory, showing as they do a decrease in the number of registered prostitutes and in the number of brothels in the protected districts. During the year, of 489 prostitutes who came into these districts from places not under the Acts, 322, or 65·8 per cent., were found to be diseased on their first medical examination—a strong proof of the necessity for some check upon the means of spreading so frightful a disease. The beneficial influence of the Acts is shown by the fact that 74 young girls under eighteen years of age, 86 women from eighteen to thirty, and 4 above thirty, who were found in bad company and improper places, but had not commenced a life of prostitution, were rescued; while 32 under eighteen and 97 above that age, "who had commenced an immoral life, abandoned it on being cautioned by the police." There are numerous tables appended to the report which show clearly a large reduction in the numbers both of women and brothels in all the districts since the Acts came into operation. In 1866, when the Act was passed, there were in the subjected districts 135 prostitutes under sixteen years of age, and of these nearly one-fourth were under fifteen; while in 1881 there were none under the latter age and only 6 under sixteen. There has also been a very great reduction in the number of public-houses and beerhouses where common women resided, or which were provided with accommodation for the purposes of prostitution. In the last ten years such public-houses have been reduced from 98 to 12, and beerhouses from 40 to 3. If a longer period than ten years be taken, the reduction is still more striking. Of the 12 still existing there are 8, and of the 3 one, in the Chatham district. Such a fact is far from creditable to the magistrates with whom the power of granting licences rests, and furnishes a strong argument in favour of giving more power to the police towards effecting the suppression of such haunts of vice. We are glad to observe that the duty of the police specially employed under the Acts has been very satisfactorily discharged, there having been only one case of excess or violation of duty brought to notice during the year.

DR. RICHARDSON AND THE EISTEDDFOD.

DR. B. W. RICHARDSON is to deliver the inaugural address of the great Welsh festival, the national Eisteddfod, which opens at Denbigh on Monday next, the 21st inst. The Eisteddfod has been held, it is said, since the fifth century, representing largely, and, indeed, almost exclusively, the arts of music and poetry. For a few years past a new section has been introduced devoted to the discussion of subjects of scientific and social importance, and now the festival is opened by some public man, statesman, or man of science or letters on the invitation of the organising committee. This year the choice of an orator fell on our medical *confrère*, who will have, it is expected, one of the largest audiences he has ever addressed.

AMBULANCES FOR THE METROPOLIS.

WE have received a paper by Mr. John Furley on the use of ambulance litters and horse carriages for the removal of sick and injured persons, especially in reference to the metropolis, which he read before a recent general assembly of the Knights of St. John of Jerusalem. After recounting the efforts of the Association to instruct the public in rendering efficient first aid to the wounded, and to provide ambulances at the police stations, Mr. Furley states: "I am of opinion that telegraphic or telephonic communication between the City and metropolitan police stations and hospitals, though it might prove occasionally advantageous, is not absolutely necessary, and that the establishment of fully-equipped ambulances in connexion with the metropolitan hospitals would entail a very large annual expenditure, which none of these institutions would be justified in incurring. But it cannot be denied that some steps should be taken to facilitate the removal of sick and injured persons, and I can but think that this want will best be met by developing the system already commenced by the St. John Ambulance Association, and placing the best stretchers and litters at police and fire brigade stations, and at other convenient places; and that at certain points, especially in the suburbs, horse ambulance carriages should be stationed ready to be sent out at short notice." Mr. Furley urges the formation of properly trained bands of volunteer ambulance helpers in towns and villages to conduct the removal of sick and injured persons, and appends the rules of some such bands already formed. The paper may be obtained on application at St. John's Gate, Clerkenwell.

GASTROSTOMY.

ON the 21st ult. Sir William Mac Cormac performed this operation, at Hackney, on a gentleman aged fifty-five years (a patient of Dr. Daly), who had malignant stricture of the œsophagus. The operation, as well as the subsequent dressings, was performed with the strictest antiseptic precautions. The procedure was divided into two stages, the stomach not being opened for fourteen days from the first operation. The temperature never rose above 98·6° or the pulse above 80. The patient, during the fortnight, was fed by the rectum, defibrinated bullock's blood being chiefly used for this purpose. The patient recovered without any unfavourable symptoms. He was up sixteen days after the operation. He is now fed through the opening in his stomach four times a day; he has a pint of milk, with a couple of eggs, or a pint of beef-tea or soup, at a time. He is gaining flesh and is in good spirits. Further details of this case will be published hereafter.

THE PHRENIC NERVES.

THE effects of lesions of the phrenic nerves have been studied experimentally by MM. Henocque and Eloy. The effects on respiration of injury to one or both were registered on recording apparatus. The immediate effect of a lesion of one nerve was found to be a change in the respiratory rhythm, the movements being at first rendered more energetic. After a few moments the diaphragm ceased to move on the side which had been injured, and the contractions of the inferior intercostal muscles and accessory elevators of the upper ribs were rendered feeble. The experiments were made on animals in which the respiration is both abdominal and costo-abdominal—the dog, cat, guinea-pig, and the monkey. Death often rapidly follows an injury to the phrenic nerve, but some animals survive, and the thorax is then motionless on the corresponding side, especially in the cat and the monkey. The respiratory movements become visible a few days afterwards, and are of course due

only to the intercostals. At a later period, during the reparation and regeneration of the nerves, the tone of the voice was observed to be altered. Respiratory tracings taken two, four, and ten months afterwards showed the gradual return of the respiratory curve to the normal. But even when the rhythm was restored, the movements continued deficient in extent. Moreover, in spite of the regeneration of the nerves, there remained an hypertrophy of the inferior intercostal muscles, set up by their supplementary activity.

HOSPITAL ACCOMMODATION IN SOUTHWARK.

WE have been at some pains to inquire into the recent case of burn in an out-patient, who died while under treatment at Guy's Hospital. The case was that of a little child one year and ten months old, suffering from burns on both arms. It was dressed in the casualty-room, attended again the next day, was redressed and sent home, where it died on the following morning. It appears that while it is the usual practice at this hospital to admit all such cases, it has been found necessary, owing to the large number of applicants for admission, to send many accidents to other institutions, while in a few an attempt has been made to relieve by outdoor assistance. At the present time we find that several surgical wards have two, three, and even four over the regulation number, so that while every effort seems to be made to meet the demand for relief, it must remain impossible to accommodate many of the cases which flock to the hospital. It may be mentioned that the population of the district in which Guy's and St. Thomas's Hospitals are situated has increased more than a million and a quarter since the beginning of the century, while the hospital accommodation has remained almost at a standstill.

DRUNK AND DYING.

WE frequently have to record cases of death from apoplexy or other disease in the police cell. In too many instances the unfortunate has been rudely lodged there under the supposition that it is simply a case of "dead drunk." This week we hear of a case from Aberdeen in which the prisoner was arrested with a companion as drunk and disorderly, and apparently the two women were at least very drunk. They were frequently seen through the night, but about 4.30 A.M. one of them was found on the floor dead. Dr. Macgregor was, of course, unable without a post-mortem to certify the cause of death, and when this was afterwards performed, along with Dr. Frank Ogston, pulmonary apoplexy was found to account for death. Professor Ogston states that sudden deaths often arise from this cause. This woman was about thirty years of age. In this case there was probably little to indicate the approaching danger, but where real illness is present or suspected the raised and sloping portion of the floor dignified by the name of bed is not likely to conduce to recovery.

ROCHDALE MANURE WORKS.

THE Rochdale system of excrement removal and disposal is about to undergo an important modification. The excreta of the population are collected separately by means of a pail-privy system, and they are then conveyed to works where they are manufactured into a manure for which a ready sale has always been obtained. But the process of manufacture is alleged to have caused nuisance, and to be somewhat expensive. Hence a new system is to be substituted for the old one, the process being one by which the contents of the pails, after admixture with chemicals to fix the ammonia, &c., will be submitted to a current of dry air at a temperature of 1200° Fahr., in revolving cylinders. The result is the almost immediate reduction of their contents to a powder, which forms a valuable manure. The contents of ashpits constitute the only fuel required, and in this one item of fuel alone a saving of over £500 a year is expected. After a series of experiments made with the aid of the superintendent of the works, to whom the new process is due, Mr. Alderman Taylor has brought the subject under the notice of the Corporation, and their sanction has been given to the purchase of such apparatus as the Health Committee may require in effecting the desired change.

UNCERTIFIED CAUSES OF DEATH IN BRISTOL.

THE Medical Officer of Health for the City of Bristol, in his report for the quarter ending June last, calls attention to the number of uncertified causes of death registered within his sanitary district. It appears that during the three months under notice thirty-three uncertified causes of death were registered in Bristol, equal to 3·1 per cent. of the total deaths. Nineteen of these thirty-three deaths were attributed to premature birth; and Mr. David Davies records his opinion that a record of the primary cause of the premature birth should in such cases be ascertained and recorded. Unfortunately, the present state of registration law makes no provision for the certification of causes of death unless a registered medical practitioner has been in attendance or an inquest is held. Neither of these conditions is fulfilled in a large proportion of cases of premature birth, hence no satisfactory evidence can be forthcoming as to the true cause of death. Mr. Davies thinks that when premature birth is the cause of the death of an infant as certified by a registered medical practitioner, it is much to be desired that, whenever possible, the cause of the premature death should be stated. We fear that the true value of careful certification of causes of death from the point of view of public hygiene is not yet sufficiently recognised. More precise information as to the large proportion of infant mortality attributed to premature birth would possess a very definite value.

THE PONT DU PECQ MURDER.

NO special medical, or even medico-psychological, interest attaches to the Pont du Pecq murder or the murderers. It seems to have been a case of consummate villainy throughout. If there be any notable feature in the affair it is the elaboration — we had almost said the refinement—of the utter scoundrelism shown by one of the delinquents. We fail to discover trace of "extenuating circumstances" in the case. The woman was, if possible, worse than the man, and the brother must have been as corrupt as, if not equally criminal with, the principals in this atrocious tragedy. It is necessary to protest against the attempt to throw a glamour of interest over crimes by treating them as of psychological interest. There is no interest in such cases; they are simply the outcome of infinitely contemptible and degraded natures, from which the stamp of humanity seems to be wholly effaced.

A VIRULENT epidemic of measles, marked by unwonted fatality, has, it is reported, broken out at Fraserburgh, a Highland village. The population almost wholly subsist by fishing, and their habitations are, as might be expected, very defective in the matter of air-space and sanitary arrangements generally.

ONE of the best maps of the seat of war in Lower Egypt which we have seen is that issued by Mr. Stanford, of Charing-cross. It is on a scale of two miles to an inch, and is admirably clear and well defined.

THE Companionship of the Order of the Bath has been conferred on Fleet Surgeon Doyle Money Shaw, Royal Navy.

DR. BARRY, who was instructed by the Local Government Board to inquire into the cause and extent of the epidemic of enteric fever at Bangor, has made a preliminary statement to the sanitary authority of that place. He arrives at the conclusion that the main cause of the outbreak, which up to last week had led to 141 attacks and 8 deaths, was pollution of the water-supply above the point of intake, but that the disease was spread by the gravely defective condition of the sewers and house-drains in respect of ventilation. In all these respects his opinion is confirmatory of that given by Dr. Rees, the local medical officer of health. Dr. Barry strongly urged remedial measures upon the authority.

THE outbreak of small-pox in Newcastle is causing considerable anxiety to the inhabitants of the town. Fortunately the sanitary authorities are in possession of a hospital to which cases may be removed, and the means of removal, in the shape of a comfortable ambulance, is provided by the Corporation. The epidemic seems to be almost entirely confined to the Byker district. In spite of energetic action on the part of the authorities, and the increased labours of the vaccination officers, the disease appears at present to give no indications of subsidence.

HEALTH OF THE ARMY.

No. II.

IN an average annual strength of 50,136 European soldiers serving in India, exclusive of the field force in Afghanistan, the proportion per 1000 of strength admitted into hospital was 1748, died 24·65, sent to England as invalids 29·88, and constantly non-effective from sickness 69·32. These are all lower than in 1879, but, with the exception of the invalids, considerably above the average of the last ten years. The reduction upon the results of the preceding year has been manifest in all three Presidencies except as regards the deaths in Bombay, where there has been a very marked increase.

In the Bengal Presidency the admissions were in the ratio of 1763, the deaths of 29·26, the invalids of 25·51, and the constantly sick of 70·29 per 1000. These ratios, and especially the deaths and mean sick, are very unsatisfactory compared with the average of the last ten years, although lower than in 1879. If the strength and casualties of the field force were added the death-rate would be as high as 32·68 per 1000, of which only 1·68 was caused by wounds in action. The most prevalent diseases were fevers, which gave rise to nearly half the admissions, and next to them rank diseases of the digestive system. The latter were the most fatal, though very little higher than fevers, and next to these was cholera. The Peshawar division as usual furnished the highest proportion of cases, from the prevalence of paroxysmal fevers, which were the cause of a great amount of sickness also in the Meerut, Gwalior, and Rawal Pindi divisions. The highest death-rate was in the Peshawar, and next to it, omitting troops on the march, in the Oudh division; in the former the excess was chiefly from dysentery and diarrhœa, fever and cholera, and in the latter from fever and cholera. In the appendix to the report a table is given "taken from the report of the principal medical officer," showing the deaths at each of the stations, but the sum of them when grouped in divisions differs so much from those accounted for in the classified table of diseases that it seems quite untrustworthy. For instance, in the Oudh division only 59 out of 82 are allotted to stations, in Meerut 59 out of 76, in Sirhind 38 out of 62, in Rawal Pindi 45 out of 82, and in Peshawar 96 out of 126. We cannot but think that if the table could not be corrected to at least a much nearer approximation it would have been better omitted, or some explanation of the discrepancies should have been given.

A table appended to the report shows that 278 cases of enteric fever and 94 deaths occurred in the command, exclusive of 90 cases with 40 deaths in the Frontier Field Force, being in the ratio of 9·07 and 3·07 respectively. The stations at which it was most prevalent and fatal were Nowshera, Lucknow, Ranikhet, Dugshai, Bareilly, Sitapur, and Moradabad. The 30th Regiment, which had just arrived from England, had 65 cases and 13 deaths at Bareilly and Ranikhet and other stations in the Rohilcund division. In the Peshawar division the disease occurred chiefly in the 8th Hussars, 12th and 14th Regiments. No information is given as to the corps in which it prevailed in the other divisions. Nearly half of the cases occurred in the second quarter of the year. Cholera was the cause of 6·8 admissions, and 4·86 per 1000 of the strength. It prevailed in an epidemic form at Allahabad and Lucknow. At the former station the admissions were in the ratio of 57·, and the deaths of 42· per 1000, and at the latter of 26·7 and 17·81 respectively. It also prevailed, though much less severely, at Cawnpore, Moradabad, and Peshawar. Among troops on the march, the average strength of which for the year was 2180, there were 41 cases and 34 deaths. With reference to the advantage derived from the immediate removal of troops from a station on the outbreak of cholera, the principal medical officer observes, "The benefits derived from leaving the infected locality have again been plainly shown, but this should be done as soon as possible, and to as great a distance as possible. 'Preparatory' camps in the neighbourhood of the infected barracks rarely produce any good effect. It would be more prudent to prepare a camp at a selected distant site as soon as the disease is reported in the city or district, and to remove the troops to it by railway at the earliest indication of disease in cantonment. The circumstances of the epidemic at Allahabad were plain as to the danger which is incurred by keeping the troops loitering about an infected locality instead of immediately removing them to a sufficient distance."

As we have already stated, diseases of the digestive system are the class which has given rise to the highest rate of mortality. In the Peshawar division the deaths by dysentery and diarrhœa amounted to 9·47 per 1000 of mean strength, and among troops on the march to 8·97. The ratio was also very high in the Meerut and Rawal Pindi divisions. It is worthy of note that there was not a single death by either of these two diseases recorded at the hill stations. There were 230 admissions and 86 deaths by sunstroke, but no information is given as to the localities where or the circumstances under which they occurred; the admissions were in the ratio of 7·50, and the deaths of 2·80 per 1000 of strength. From an examination of the tables we infer that Peshawar and Lahore furnished an undue proportion of the deaths.

The remarks by Surgeon-General Crawford—now Director General—on the sanitary conditions of the troops in Bengal, and their influence on the character of prevailing diseases, are deserving of careful study. We cannot afford space to enter upon all the points discussed, but shall confine ourselves to the following extracts on the subject of the diet of the soldier. In a memorandum by the Army Sanitary Commission it is stated "that by the experience of medical officers much of the loss from invaliding in Indian climates is due to the continued action of habits of eating, drinking, and clothing, which are directly opposed to the requirements of those climates. In every one of these points improvements can be introduced. What is wanted, in fact, is not transference to India of the European method of rationing and management, but the adoption of a rational regimen for the British soldier adapted for Indian climates; possibly more than one such regimen would be required in different districts of the country." On this Dr. Crawford remarks: "Such a proposal is extremely plausible, and no one can doubt but that if diets of large bodies of soldiers could be made more suitable to the climate, a great proportion of disease under Group IX [diseases of the digestive system] would disappear. But the practical difficulties in the way are enormous, and even supposing that six or seven such suitable diets for India, from Colombo to Peshawar and Thayetmyo, could be arranged and enforced, the possibility of reduced dietetic diseases would still remain doubtful, because it is less what the soldier eats and drinks by order which produces disease than what he eats and drinks without order . . . . . And the Sanitary Commission do not state what is to be done if the soldier does not accept that view of a reduced diet. . . . . The remarks of the Army Sanitary Commission do not appear to have been based on a sufficient appreciation of the fact that the main difficulty to be overcome in reducing dietetic disease in India is to

induce the soldier to be self-denying, temperate, and careful individually. So far as the regulations are concerned every forethought is given as to what he should eat and drink and what he should avoid. But considerations of health are rarely balanced against temporary enjoyment, and sickness too often follows, not from want of due care by the authorities, but, in spite of all rules, by the carelessness of the soldier himself." These are evidently the matured opinions of a man accustomed to deal practically with soldiers, as opposed to the theoretical ideas evolved in a room in the great establishment at Pall-mall.

In Madras the strength of the troops was 10,280, and the admissions into hospital were in the proportion of 1370·, the deaths of 10·51, the invaliding of 23·15, and the mean sick of 62·96 per 1000. These ratios are all lower than in 1879, and those of the deaths and invaliding are considerably under the average of the last ten years. The artillery furnished the highest proportion both of admissions and deaths, the cavalry the lowest of admissions, and the infantry of deaths in the command. Paroxysmal fevers were the most prevalent diseases, and next to them diseases of the digestive system, and the latter gave rise to the highest death-rate. Of the larger stations, Bellary and Rangoon both furnished heavy sick rates, and Kamptee a high death-rate. This excessive sickness was due to the prevalence of paroxysmal fevers, and the mortality at Kamptee chiefly to enteric fever and sunstroke. Twenty-five admissions and eleven deaths by enteric fever are recorded. Of these 1 occurred at Bellary, 1 fatal case at Tayrangoon, 13 cases and 6 deaths at Secunderabad in a force of 2530 men, and 10 cases with 4 deaths among 770 men at Kamptee. The evidence with regard to the disease at Kamptee points very clearly to contaminated water-supply as the cause, and the outbreak ceased on the well being closed. No information is given as to circumstances under which the cases occurred at Secunderabad or the probable causes. Only one case of cholera, which, however, terminated fatally, occurred in the command, at Tayrangoon in British Burmah. As usual, in this Presidency, hepatitis and abscess of the liver proved the most fatal in the class of diseases of the digestive system, having been the cause of 14 out of 21 deaths.

The average strength of the troops in Bombay was 9200. The admissions into hospital were 2118, the deaths 25·10, the invaliding 51·96, and the mean sick 70·89 per 1000. The proportion of deaths was one-half higher than in 1879, but the other ratios were lower than in that year; all, however, were greatly above the average of the last ten years. The most prevailing diseases were paroxysmal fevers, the cases of which were nearly equal to the average strength, and diseases of the digestive system, which were upwards of one-fourth of it. Fevers and diseases of the digestive system were the causes of upwards of half the deaths. The admissions were excessively high at Baroda, Kurrachee, Neemuch, and Ahmednugger, and the deaths at Kurrachee, Bombay, and Ahmednugger. The unhealthiness of Kurrachee is attributed by the principal medical officer to the arrival of the 98th Regiment in September "in a weakly state, many of the men presenting symptoms of a scorbutic taint, supposed to have originated in Malta, where they had served four years, and three years previously in the West Indies; they suffered much at Kurrachee from paroxysmal and other fevers." The depôt of the 66th Regiment was also stationed there during the absence of the regiment in Afghanistan, and this may have contributed to the high sick-rate. At Poona "a considerable proportion of the garrison was formed by depôts consisting of the more weakly men of regiments on field service in Afghanistan, from which also many men were sent back in bad health;" and the 1st battalion Rifle Brigade arrived at an unfavourable season during the month of October. The high rate of sickness and mortality at Bombay and Colaba is also "accounted for by the arrival of the 61st regiment from Malta at the most unfavourable period of the year." There can be no doubt that the high rates of sickness and mortality in Bombay were greatly influenced by the Afghan war, which involved the necessity for troops being brought out to India at unfavourable periods, and also for the weak and sickly men being left behind when the regiments left for service in the field. There were 53 cases with 33 deaths of enteric fever in the command, being in the ratio of 5·76 and 3·59 per 1000. The stations at which it was most prevalent were Mhow, Kurrachee, Nusseerabad, Poona, and Kirkee; and the principal medical officer states that "from all the information collected suspicion is attached to the drinking water" as the cause of it. Half the cases and deaths occurred in the last quarter of the year. There were no cases of cholera in the command during the year. The mortality from dysentery was very high in the Sind circle, which includes the station of Kurrachee, and it was also high in the Presidency division.

There does not appear to be anything calling specially for remark in the health of the troops on board ship, except the occurrence of two cases of enteric fever in H.M.S. *Euphrates* on the voyage from Malta to Bombay, probably contracted in Malta, which suggests the possibility of a connexion with the cases which occurred in the Bombay command in the last quarter of the year.

A NEW MEDICAL SOCIETY FOR THE WESTERN SUBURBS OF LONDON.

ON Friday afternoon, July 28th, a numerously and influentially attended meeting of medical men practising in the western districts and suburbs of London took place in the board-room of the West London Hospital, and after voting Dr. Goddard Rogers into the chair, carried a series of resolutions, the most important of which constituted a new society. This, now named the "West London Medico-Chirurgical Society," is to meet at the above-mentioned hospital on the first Friday of every month, at 8 P.M., throughout the winter, for the consideration of subjects connected with the arts and sciences of medicine, surgery, and midwifery. The annual subscription is five shillings, and there is no entrance fee. Though intended mainly for the use and advantage of local practitioners, all "medical men not practising homœopathy" are eligible for membership. The Society has been started with considerable enthusiasm, although in consequence of the near approach of the holiday season and the desire to give the council and secretaries time to prepare for next winter, the meeting was held at somewhat short notice. The Society is likely to commence with about a hundred original members. The Council are keeping the list of original members open, and the secretaries are anxious to receive applications for membership. The following officers were elected for the first year:—President: Dr. Edward Hart Vinen. Vice-Presidents: Dr. Thudichum, Mr. B. J. Vernon, Mr. Hemming, and Mr. Frederick Lawrence. Treasurer: Mr. William Bird. Council: Drs. Alderson, Picket, Goddard Rogers, Sinclair, Thompson, W. Travers, Messrs. Alderton, Barnes, Sunn, Ottley, Potter, Walker, and Willing. Secretaries: Mr. C. B. Keetley and Mr. F. F. Schacht.

The new Society has an excellent room to meet in, very conveniently placed for access by rail and omnibus, and it has already a goodly number of members; it has an able and experienced president, and the idea of it appears to have been everywhere received with great cordiality. A district which includes, besides hospitals, three magnificent Poor-law infirmaries and several dispensaries must furnish plenty of material.

Public Health and Poor Law.

REPORTS OF THE METROPOLITAN ASYLUMS BOARD HOSPITALS.

Fulham Hospital.—Mr. R. D. R. Sweeting, the medical superintendent of this hospital, reports that during 1881 the total admissions of small-pox patients were 1952, the mortality being at the rate of 7·3 per cent. amongst the vaccinated, 31·0 amongst those whose vaccination was "doubtful," and 44·3 amongst the unvaccinated. During the months of October and November cases were admitted only from the borough of Chelsea, in accordance with the terms of an injunction which was obtained against the use of the hospital for the metropolis generally. Amongst the more interesting points adverted to in the report we would note the following. As many as 120 vaccinated children under ten years of age were admitted. Only three of them were efficiently vaccinated,

but the large number suffering from small-pox before the period at which revaccination is generally deemed necessary is an important consideration in determining the proper date for that operation. Amongst the diseases admitted in mistake for small-pox, measles stands first on the list, and it is pointed out how much more difficult the diagnosis is between measles and the early stage of small-pox than between chicken-pox and small-pox. All the cases of measles sent to the hospital in error were received as small-pox, but out of thirty-two cases of chicken-pox thus sent, twenty-six were at once diagnosed and hence refused admission. Since the hospital was opened Mr. Sweeting has met with small-pox in forty-four patients after alleged revaccination, and he has reported the details of the cases to a Committee of the Epidemiological Society who are investigating this subject. One undoubted example of small-pox incubated in utero came under observation. The child was born two days after the mother's attack, and its eruption appeared on the seventh day after birth. The immunity of the staff from small-pox is adverted to, but we have recently given Mr. Sweeting's interesting information as to this as summarised in his Memorandum on Vaccination.

Deptford Hospital.—Dr. J. MacCombie reports that 3185 acute cases of small-pox were admitted, in addition to 1590 convalescents who were sent from other hospitals to Deptford on their way to the small-pox encampment at Darenth. The mortality among the vaccinated was 7·6 per cent., that amongst those alleged to have been vaccinated, but on whom no indication of the operation could be seen, was 35·9 per cent., and that amongst the unvaccinated was 47·4 per cent. Further, dividing the vaccinated into two classes, the mortality was 3·5 per cent. amongst patients having marks covering at least one-third of a square inch, whereas it was 9·5 amongst those with imperfect marks. Dr. MacCombie finds that, given good vaccination marks, children under ten years, or even fifteen years, of age run but little risk of death from small-pox, but that given vaccination as it has hitherto been performed, the mortality steadily rises from 1 per cent. amongst those under ten years to 2·8 per cent. between ten and fourteen years, and he shows also that the protection afforded by vaccination against fatal attacks of the disease is exhausted at an earlier age in the imperfectly vaccinated than in the well vaccinated. So also his experience, as detailed, is to the effect that the highest proportion of small-pox attacks amongst the vaccinated occurs at the two periods ten to fourteen years, and fifteen to nineteen years, the proportion of attacks in these two periods being respectively 19 and 21 per cent., and he infers that the influence of primary vaccination is lost in about an equal proportion of vaccinated subjects in the five years immediately preceding and immediately following the usual age of puberty. Hence, he urges, that revaccination should, as a rule, and not only as an exception, be performed some five years before puberty. He also alleges that some persons are so susceptible to small-pox that the efficient protection afforded by revaccination may wear out in some ten years, and he states that out of 3855 vaccinated patients admitted, twenty-two were found to have been successfully revaccinated in early life. The only exceptions to the immunity of the staff from small-pox occurred in a fever nurse, whose revaccination was overlooked, and in a ward servant, whose revaccination came too late to afford protection.

Stockwell Hospital.—In the fever hospital there were 1223 admissions, including 955 cases of scarlet fever, 162 of enteric fever, and 68 of typhus. Into the small-pox hospital 999 cases were admitted, and Dr. Bernard gives the mortality as 6·5 per cent. amongst the vaccinated, 44·1 per cent. amongst the doubtfully vaccinated, and 40·2 amongst the unvaccinated.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5288 births and 3425 deaths were registered during the week ending the 12th inst. The annual death-rate in these towns, which had been equal to 19·0, 19·6, and 20·1 per 1000 in the three preceding weeks, further rose last week to 21·1. The lowest rates in these towns last week were 11·9 in Halifax, 13·1 in Derby, and 15·4 in Plymouth. The rates in the other towns ranged upwards to 26·3 in Hull, 27·5 in Huddersfield, 28·6 in Newcastle-upon-Tyne, 29·3 in Bolton, and 31·1 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 752, showing a further increase of 53 upon recent weekly numbers; 439 resulted from diarrhœa, 97 from whooping-cough, 80 from scarlet fever, 59 from measles, 45 from "fever," 24 from diphtheria, and 8 from small-pox. The lowest death-rates from these diseases occurred in Wolverhampton and Halifax, and the highest in Sunderland and Hull. Whooping-cough caused the highest death-rates in Sunderland and Preston; scarlet fever in Hull and Portsmouth; measles in Huddersfield; and "fever" in Birkenhead and Derby. Of the 25 deaths from diphtheria in the twenty-eight towns, 18 occurred in London. The fatal cases of diarrhœa in the twenty-eight towns showed a further considerable increase upon recent weekly numbers, although they were again far below the average for the season; the highest death-rates from this disease were recorded in Bolton and Leicester. Small-pox caused 4 deaths in London, 3 in Newcastle-upon-Tyne, and 1 in Nottingham. The number of small-pox patients in the metropolitan asylum hospitals, which in the fifteen preceding weeks had declined from 350 to 138, further fell to 123 on Saturday last; 19 new cases of small-pox were admitted to these hospitals during last week, against 10 and 16 in the two preceding weeks. The deaths referred to the diseases of the respiratory organs in London, which had been 157, 183, and 193 in the three previous weeks, further rose to 223 last week, and were 53 above the corrected average number in the corresponding week of the last ten years. The causes of 92, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Plymouth, Derby, Birkenhead, and Cardiff; while the largest proportions of uncertified deaths occurred in Brighton, Liverpool, Salford, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been 21·3 per 1000 in each of the two preceding weeks, declined to 20·1 in the week ending the 12th inst.; and was 1·2 below the mean rate last week in the twenty-eight large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns were 118 last week, and showed a slight increase upon recent weekly numbers; they included 61 from diarrhœa, 14 from scarlet fever, 13 from diphtheria, 11 from measles, 11 from whooping-cough, 8 from "fever," and not one from small-pox. The death-rate from these principal zymotic diseases averaged 5·0 per 1000, and was 1·1 above the mean rate from the same diseases in the large English towns. The 61 deaths attributed to diarrhœa exceeded the number in the previous week by 5, and were 24 above the number in the corresponding week of last year; the fatality from this disease again exceeded that recorded in the English towns, the largest excess occurring in Dundee and Leith. The 14 fatal cases of scarlet fever showed a marked increase upon recent weekly numbers, and included 6 in Glasgow, 3 in Leith, and 2 both in Dundee and Aberdeen. The 13 deaths from diphtheria also showed a further increase, 9 being returned in Glasgow and 3 in Greenock. The 11 fatal cases of measles included 4 in Dundee, 4 in Leith, and 3 in Glasgow; 42 fatal cases of measles have occurred in Dundee since the beginning of July. Six of the deaths from whooping-cough occurred in Glasgow, and 2 both in Edinburgh and Perth. The 8 deaths referred to "fever," of which 6 were returned in Glasgow, were 2 fewer than those in the previous week. The deaths referred to acute diseases of the lungs in the eight towns, which had steadily declined in the four preceding weeks from 95 to 74, further fell to 71 last week, and were fewer by 16 than those attributed to the same diseases in the corresponding week of last year.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 20·8 and 22·9, rose again to 21·1 in the week ending the 12th inst. During the first six weeks of the current quarter the death-rate in the city has averaged 21·0 per 1000, against 18·2 in London and 18·1 in Edinburgh. The 157 deaths in Dublin last week showed a further increase of 4 upon the low numbers of recent weeks; they included 6 which were referred to "fever," 9 to diarrhœa, and not one either to small-pox, measles, scarlet fever, diphtheria, or whooping-cough. Thus 15 deaths resulted from these principal zymotic diseases,

against 12 and 16 in the two preceding weeks; these were equal to an annual rate of 2·2 per 1000, against 3·9 in London and 2·5 in Edinburgh. The fatal cases of diarrhœa, which had been 5 and 6 in the two previous weeks, further rose to 9 last week, and exceeded the number returned in any previous week of the year. The deaths referred to different forms of "fever" (mainly enteric or typhus), which had been 3 and 7 in the two previous weeks, were 6 last week. The death-rate from "fever" considerably exceeded the average rate from the same cause in the twenty-eight large English towns. The deaths of infants corresponded with the number of the previous week, while those of elderly persons showed a considerable increase. The causes of 21, or 13 per cent., of the deaths registered in the week were uncertified.

THE SERVICES.

Sir Robert Christison, Bart., at present Surgeon General of the N.W. Provinces, India, will be succeeded by Deputy Surgeon-General J. Walker, Bengal Medical Service.

Brigade Surgeon J. Guthrie has been appointed to officiate as Principal Medical Officer of the Oudh Division, with the temporary rank of Deputy Surgeon-General, vice Surgeon-General J. E. Clutterbuck, transferred to the Home establishment and posted to Malta.

YEOMANRY CAVALRY.—East Lothian: Surgeon David James, M.D., resigns his commission.

ENGINEER VOLUNTEERS.—1st Lancashire: Acting Surgeon Robert Arthur Henry Wood resigns his appointment.

ADMIRALTY.—Fleet Surgeon John Mockridge has been placed on the Retired List of his rank.

The following appointments have been made:—Staff Surgeon W. J. Inman, to the *Warrior*, vice Mockridge; Staff Surgeon Alexander Mitchell, to the *Dragon*, vice Hudson; Surgeon Andrew D. Peyton, to the *Cambridge*, vice Miller, appointed to the *Dee;* Surgeon Thomas D. Gimlette, to the *Seahorse;* Surgeon John G. Wray, to the *Orwell*, vice T. D. Gimlette.

Correspondence.

"Audi alteram partem."

WHAT HINDERS NOTIFICATION OF INFECTIOUS DISEASE.

To the Editor of THE LANCET.

SIR,—Anyone reading the letter signed "R." in your last issue, on the notification of infectious disease, with your annotation thereon, might very probably consider your remarks fairly called for, always supposing that the statements contained in "R.'s" letter accurately represented the facts of the case. Let us see, however, how far "R.'s" version of the case is really the true one, and whether his letter is calculated to lead your readers to a just appreciation of the conduct of the sanitary authority and its officers in Blackpool.

To economise space, I will deal with "R.'s" letter and your annotation conjointly.

First, then, in this borough, when the house of any poor person is invaded with infectious disease, the Corporation undertake (when it is considered advisable by the medical attendant and desired by the patients or their friends) to remove the infected person to the sanatorium at the town's expense, and maintain the patient with a relative to nurse the case, if so desired, at a trifling cost, until the sickness is over and convalescence complete; each medical man attending his own patients.

Secondly, the Corporation supply, gratuitously, disinfectants of all kinds for every purpose, including carbolised oil in scarlatinal cases, to poor persons who are unable or unwilling to procure the same for themselves.

Thirdly, as soon as the medical attendant considers the proper time has arrived, the houses are thoroughly cleansed and disinfected; all clothes and bedding are disinfected or destroyed when necessary, in the latter case compensation being made, and all the expenses of disinfection being defrayed by the Corporation.

Now, Sir, in the case referred to by "R." the patient was a young child of a poor cab driver who had just come to Blackpool, and imported the disease from a distance. As such the case was notified to me on June 16th. As customary, the first thing that was done by the sanitary inspector was to offer removal to and accommodation in the sanatorium with the consent of the medical attendant, but this was declined. Isolation being refused, the inspector, acting on my instructions, told the cab driver that as he was living in the same house with a patient suffering from scarlatina he should not ply for hire. In so instructing the inspector I believed I was removing from "R.'s" shoulders the odium which attached to such a duty, and which "R." would only be glad to escape. At the same time the inspector was instructed not to interfere in any other way with "R.'s" conduct of the case. I trusted to "R." to let me know through the inspector when the cabman might safely resume his employment.

I now come to the statement in "R.'s" letter that on the 18th, while desquamation was still proceeding, the inspector gave the cab-driver permission to ply for hire. This statement the inspector declares is absolutely untrue, and I fully believe him. The inspector never saw the man at this time. The man's wife entreated the inspector to see for himself that the child was sitting up and better, which in these parts means well; she stated that "the doctor had given over coming," that her husband never went near the child, and slept in another room, and begged that he might be allowed to "take a job," which she particularised. To all this the inspector replied that it was very soon for her husband to ply for hire, but that her own doctor should know best; he never, as stated in "R.'s" letter, "gave permission," and the cab-driver ultimately resumed work on his own responsibility. It was at this time that the inspector, believing the woman's tale that the doctor had ceased attendance, suggested cleansing and disinfecting the house, as soon as the child was well enough, and told her where she could get the disinfecting oil supplied by the Corporation in such cases. It is utterly false, and a *pure invention of somebody's*, to say that a prescription was left at the house by the inspector; he never did so, either by my directions or without them. With the exception of what I have stated above, the whole story is a pure fiction. The paper which the inspector showed subsequently to "R." at "R.'s" house was one in which I had written down more than a year before, the form for preparing the carbolised oil, the druggist who supplies disinfectants for the Corporation having at the time forgotten the verbal instructions I had given him long before, some time in 1879, for preparing it. This paper never after saw the light until the night of June 20th, when it was shown to "R." by the inspector, at the time he was, by my directions, making an explanation to "R." of the real facts of the case. It was after all this that the inspector ascertained that "the doctor" had not ceased attendance on the case. The conversation I have above referred to between the inspector and the child's mother was the only approach to interference on the inspector's part from beginning to end of the case, and your statement that "when the medical man called on the 20th he found the work very much taken out of his hands" is utterly untrue and groundless. I myself trusted altogether to "R.'s" conduct of the case, and believing that in endeavouring to check the dissemination of the disease I had at the time done all my duty (the case having been notified as "imported"), never went near the house. I have never seen either the cabman, or his wife, or the little patient, and I never heard until the night of the 20th that the carbolised oil had been suggested by the inspector; nor did I know until after the sanitary meeting of the 21st that the borough surveyor had offered employment to the cabman during his temporary suspension from his ordinary work, and this is the first time, to my knowledge, that such a proposal has been made.

I must now say, Sir, that I think Mr. MacDonald, the inspector, has just cause of complaint against "R.," who, in his letter to a public journal, distinctly implies a falsehood to him, choosing to believe the woman, who it is evident had strong motives for saying what the inspector alleges she did say, rather than the inspector, who could have no motive in inventing an untruth. It also appears strange to me, a reader of THE LANCET for nearly twenty years, that you should depart from your usual custom in this case, and pass such a

judgment as is contained in your annotation, on the indictment made in "R.'s" letter, before hearing both sides of the case.

Sir, the whole story is a bubble, though perhaps not quite a bubble which bursts itself: it reminds one more of one of Dr. Carver's glass balls at the Aquarium, the fiction of which it is composed being vitrefied with a little truth: it requires breaking. The process of smashing up the ball is easy, but vexatious to one whose time is valuable, and can be better employed.

I will, Sir, very soon offer for your acceptance a *résumé* of the results of compulsory notification in Blackpool, and I think I can convince your readers that the Act has done great good in the borough, and has been a large factor in securing immunity from infectious disease to the vast numbers of people who visit this health-resort. At the same time I shall endeavour to show that where compulsory notification obtains the Legislature should insist that the medical officer of health should be untrammelled by private practice, and free from all the influences connected with it, which tend to curtail the efficiency of his work for the public good. This would also place him out of reach of attacks made on him through his official position, and which are based on feelings from which, it is said to say, some members of our profession are not altogether free.

I am, Sir, yours, &c.,

LESLIE H. JONES, M.D., &c.,

August 14th, 1882. Medical Officer of Health, Blackpool.

I have read the above letter, written by the medical officer of health, and I am prepared to declare on oath, if necessary, that the statements contained in it are true.

(Signed) FRANCIS MCDONALD.
Inspector of Nuisances.

*** Our remarks were intended to apply to all cases of a kind similar to that which seemed to be set forth in the letter of our correspondent "R."—ED. L.

"STAMPING OUT SMALL-POX."

To the Editor of THE LANCET.

SIR,—It is very natural that a gentleman who has been especially engaged in contending with an outbreak of small-pox should consider that the exertions of the staff of which he was a member had materially shortened the duration of the epidemic. Yet the facts so impartially stated by Dr. Higham Hill in your issue of the 29th ult. having reference to a recent outbreak in Sydney, New South Wales, do not clearly support such an opinion; and with regard to the estimation of the value of measures of quarantine and isolation in general you may think it worth while to point this out. Dr. Hill admits that, in the absence of compulsory registration of cases of small-pox (a want which was supplied by Act of Parliament during the seventh month of the outbreak), there were many concealed cases which formed "hot-beds of infection," and which protracted the epidemic. These cases of concealment were generally believed in Sydney to be very numerous, and the attention of the Government was drawn to their existence during the early months by a physician who is a member of the Legislative Assembly. These being the facts, then—that small-pox existed among an ill-vaccinated population, that measures of isolation were imperfectly carried out, and that the total number of cases of illness was nevertheless extremely small, although they were spread over a period of nearly eight months—if Dr. Hill's opinion that the epidemic may be fairly said to have been stamped out be accredited, it must be inferred that isolation of persons suffering from small-pox is not a measure of much value in checking the spread of the disease. But this is contrary to experience.

The contagiousness of small-pox is relative in degree to conditions which are local and constitutional. The local conditions of Sydney are—a population of about 270,000, spread over a very large area; its position on the east coast of Australia, so that the prevailing winds reach it after crossing the Pacific, while to the west is an immense extent of forest land which ends only at the great central wilderness, and whence blow very dry winds; and the position of the city itself upon the banks of a harbour of which the numerous and far-reaching arms and bays are full of very deep water, and penetrate and divide the most populous parts of it in very many directions. The air is pure and exhilarating to a degree only comparable with mountain air, and the sunlight is constant. The constitutional conditions of its people are—constant employment, high rates of wages, reasonably numerous holidays, and such supplies of good food of all kinds as the London artisan never sees except on some such rare occasion as that of a club dinner; and the knowledge that he is an important and powerful member of the community, which, if it do not always breed content, at least gives healthy occupation to his mind.

I do not wish to undervalue the effect of the measures which Dr. Hill took an able part in carrying out under grave difficulties; but I think it due to the general question of quarantine and isolation to point out that upon the whole there are strong grounds for believing that his case does not detract from the value of those measures, as his account of it leads the reader to infer. On the contrary, the just inference is that with a perfect system of isolation, and, what is much more important, with compulsory vaccination, small-pox would not assume epidemic proportions in Sydney.

I am, Sir, yours truly,

London, August 1st, 1882. J. ASHBURTON THOMPSON, M.D.

VACCINATION IN ENGLAND AND IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—Dr. Hamilton's letter on Vaccination in Scotland deserves a reply, especially as he is of opinion that, north of the Tweed, they manage this important operation better than in England. In Scotland the limit of time allowed for vaccination is six months, in England it is three. Dr. Hamilton mentions various reasons why the longer time should be preferred; but in my opinion there are stronger reasons why the three months' limit should be adhered to. If a child should be born with constitutional syphilis, three months would be ample time in which to allow the symptoms to manifest themselves; and if at the end of that period a child looked healthy, I should have no hesitation in vaccinating it, instead of waiting for three months longer, to see if any symptoms of the disease should appear. When a child is vaccinated at the age of three months it gets over the effects of the operation before the troubles of dentition begin, which are often of themselves sufficiently severe without being complicated by vaccination. Cutaneous eruptions, convulsions, and various other ailments, are more apt to manifest themselves during dentition than at any other time; and should a child, when vaccinated about the age of six months, be seized with any of those affections, the vaccination would get blamed for it. Then, should an epidemic of small-pox break out in a locality, it would be better to be able to enforce the vaccination of all infants when three months old rather than allow them to remain unvaccinated for three months longer, during which time they would be exposed to infection. In Scotland, vaccination cannot be enforced until a child attains the age of six months. In the large English towns many persons change their place of residence so frequently, and remove to districts apart from where the infants are born, that many of them are lost, and cannot be traced by the vaccination officers For this reason London is the worst vaccinated city in the kingdom. To extend the time of vaccination to six months would aggravate this state of matters.

The vaccination grant is an allowance by Government of 1*s.* a head upon each infant vaccinated at the public station. This raises the fee to 2*s.* 6*d.* a case (not too large a sum). The grant is given to encourage careful and efficient vaccination. Last year £12,000 were distributed among the public vaccinators of England, and notwithstanding Dr. Hamilton's remarks about "duty," I am inclined to think that the majority of medical men in Scotland would consider it just that a fair proportion of this sum should have been allotted to deserving public vaccinators in their country. I believe that in Scotland no vaccination fees are paid out of the rates except for the infants of those who are in receipt of parish relief. In England the public vaccination station is free to all, and I have no hesitation in affirming that infants vaccinated at the public stations are more efficiently protected against small-pox than are those vaccinated by private practitioners, who are often satisfied with one vesicle.

I am, Sir, your obedient servant,

Manchester, Aug. 7th, 1882. T. N. O.

"SALICYLIC SILK."

To the Editor of THE LANCET.

SIR,—In reference to the use of the mackintosh with the salicylic dressing, will you allow me to say that, although the mackintosh *was* used in the cases published by me in THE LANCET last year, it was shortly afterwards discontinued, according to Mr. McGill's original suggestion.

Yours faithfully,

WALTER H. BROWN,

Late House-Surgeon to the General Infirmary, Leeds.

August 13th, 1882.

SCOTTISH NOTES.

(From our Correspondent.)

IT is announced that Dr. Macintosh, F.R.S., at present Superintendent of Murthly Asylum, Perthshire, has been appointed to the chair of Natural History at St. Andrews, rendered vacant by the translation of Dr. Alleyne Nicholson to Aberdeen. Not only the many scientific friends of Dr. Macintosh, but all interested in the welfare of St. Andrews, will rejoice at the excellent selection made by the patron, the Marquis of Ailsa. Besides the work done in zoology by Dr. Macintosh, and known to all scientists, he has at Murthly surrounded himself with a collection, in the vegetable as well as the animal world, which of itself would form a respectable museum, while his efforts to the same end, in so completely furnishing the Perth Museum, show further his enthusiasm for the subject he will now be called upon to teach.

An important motion was under discussion at the last meeting of the Aberdeen Town Council. The Lord Provost proposed, and it was unanimously agreed, that a City Improvements Bill should be proceeded with next session. He went on to detail the alterations which he thought should be embraced in the scheme, which is altogether of an extensive character. By the method mentioned many advantages from a health point of view are likely to accrue, as several of the best known rookeries will be removed that the new and necessary thoroughfares may be provided. The Links, it would appear, are now owned in part by others as well as the corporation, and it is proposed that those interests should be purchased. These valuable recreation grounds will also be more accessible if Castle-street is extended thereto as proposed, and if the other drives mentioned are formed. The excellent bathing facilities will then be more easily obtained, and these it is proposed to increase by large additions to the bathing establishment. The Bill, as foreshadowed, seems specially intended to afford better means of communication throughout the town, to meet the wants of the rapidly increasing suburban population, and to extend the city boundaries; but such demolitions are involved as will have a most wholesome influence upon the public health.

Long lists have been published as advertisements in the daily papers, recording the successes of students during the past session. When well deserved, such a stimulus is likely to be useful, but honourable mention and certificates should indicate more than medium merit, and that this is scarcely so is indicated by the fact that fifty per cent entitles the student to a place among the distinguished ones. What excuse is offered by the unsuccessful it is difficult to surmise, but, perhaps, the mention of almost 150 names in one class so reduces the number of the disappointed that the trifling residuum needs little consideration. If fifty per cent. entitles a student to honours, the not unnatural question arises, What is the percentage necessary for a pass or for honours in the M.B. Examination?

The bathing season is this year peculiarly prolific of accidents in Scotland. As many as eight fatalities have been thus caused in one day, and the season's sacrifice promises to be very large. One would imagine that some of the sea-coast towns would find it to their advantage to provide and offer special guarantees against a form of death so common and expected as scarcely longer to deserve classification as accidental. In private establishments men are kept ready for rescue in an emergency, and the frequency with which they require to act, as well as the immunity from accident which those useful institutions enjoy, point to stricter police regulations and the employment of good swimmers to carry these out, as likely means for the saving of life, at least in the more frequented towns and villages.

It is marvellous how little is done in Scotland to render the popular health resorts more attractive. We take our cures from change of air just as seriously as we do physic. In almost none of the watering-places have we any provision made for rational enjoyment, and such common seaside pastimes as promenade concerts, balls, &c., are scarcely known, while floating baths, aquaria, picture-galleries, and even proper boating facilities are unheard-of luxuries, except at Rothesay, where some attempts have been made to follow southern models. The variety so necessary to the convalescent or overworked is difficult to find, and the town which would energetically engage to provide fitting amusements would be amply repaid.

The public health of Brechin is so bad at present that Drs. Anderson and Lawrence have felt it their duty jointly to call the immediate attention of the authorities to the subject. They forcibly point to the laxity with which complaints as to defective drainage, suspected water, &c., are considered, and mention instances where both of these are evidently the cause of the typhoid fever so prevalent at present. As is usual in these cases, the first effect of the independent criticism is disagreement all round. The owners of the suspected well write to say that on the authority of an analytical chemist their water is pure. The chemist publishes his report, and shows that he gave but a qualified approval. The magistrates are not allowed to take a sample of water from this private source for analysis, even though one of the partners is provost of the town; and the only satisfactory action taken is with regard to the drainage, which will have immediate attention. The medical men urge that notification of infectious diseases should be enforced, and are evidently prepared to accept the duty.

Typhoid fever has also broken out in Cupar, but precautionary measures have been at once adopted against its spread.

IRELAND.

(From our own Correspondent.)

THE rapid development of the medical sciences, especially physiology, has demanded an outlay at all large medical schools, so as to allow the teaching to keep up with the advances that have been made. The School of Physic of the University of Dublin, and the Medical School of the Royal College of Surgeons have had large sums expended for this purpose, and the Board of the Ledwich School of Medicine and Surgery have very wisely determined to make certain alterations and additions at their institution, so as to constitute it thoroughly efficient in every respect. Contracts have been signed and the work is now being rapidly carried on, the estimated cost being upwards of £500. It will include a physiological laboratory, a chemical laboratory capable of accommodating at least seventy students, a museum for the teaching of pathology and osteology, a lavatory supplied with hot water, spirit tanks for subjects, &c.

The annual report of the President of the Queen's College, Galway, for the session 1881-2 shows that the College has steadily progressed, and it is worthy of note that the success of the Queen's Colleges was never so marked as at the time they lost their special privileges and vested educational interests as the constituent parts of the Queen's University. The number of students in the Colleges, which was 375 in the opening session, 1849-50, and which rose to 958 in 1879-80, was increasing at a much more rapid rate during the last two sessions of the University. The number stood at 1010 in 1880-81, while the closing session 1881-2 exhibited results more satisfactory than any previously recorded, the number of students receiving instruction being 1154. One hundred and twenty-two students attended lectures during the past session in the Faculty of Medicine at the Queen' College, Galway, the highest number yet recorded.

From the twenty-fourth report of the Board of Superintendence of Dublin Hospitals, it appears that nine institutions receive grants from Parliament. The number of patients admitted during the year was 8970, which, with 798 previously in the hospitals, made a total under treatment of 9768. The deaths amounted to 452, or a mortality of

5·12 per cent. on those treated to a termination; and the total average daily number of beds occupied was 718. The income was £38,653 18*s.* 1*d.*, and the expenditure £37,807 3*s.* 1*d.*, the large sum of £8381 2*s.* 2*d.* for salaries of officers and wages of servants being included in the latter. There is a considerable difference in the average annual cost of a bed for maintenance in these nine institutions respectively. For example, in Cork-street Fever Hospital the cost was as high as £87 18*s.* 11*d.*, while in the Westmoreland Lock it was £28 16*s.* 4*d.*, and in the Incurables as low as £10 18*s.* 10*d.* It is satisfactory to learn that the apartment which is placed under the seats of the operating theatre at the Richmond Hospital, and in which autopsies were heretofore conducted, is no longer to be used for that purpose.

The state of the Recorder's Court in Dublin has long attracted attention, and last week, prior to his lordship taking his seat, a suitor, owing to the excessive heat and bad ventilation, fainted. The Recorder has on more than one occasion represented the state of Green-street Courthouse buildings to the authorities at the Castle, and these representations found their way from the Castle to the Corporation, who were the responsible parties; but with that body the matter remained a dead letter. At a meeting of the Town Council last Monday, one of the members said that nothing could be worse than the condition of the courts in question. The cells beneath were simply "pest-houses," and the sanitary and other arrangements were absolutely disgraceful. The Corporation had applied to the Government and to the Grand Jury to make the necessary alterations, and ultimately a presentment was put for £2500 to be expended in remodelling the courthouse. This was cut down to £500, and eventually thrown out by the Grand Jury. There are some who consider that a new site and an expenditure of some £50,000 will be required, as to endeavour to alter the present structure would be throwing money away.

An association has been formed for opposing the Compulsory Notification of Infectious Diseases by medical practitioners, as it has been ascertained that many, while in favour of notification in the abstract, protest against the imposition of such compulsion upon the medical attendant. It is feared also that should the Bill at present pending in the House of Commons, and specially intended for England and Wales, be adopted, it would be followed by an extension of the same law to Ireland.

The annual Report of the Local Government Board is satisfactory in reference to the considerable decrease which has taken place, as compared with the previous year, of persons receiving in-door relief. A large decrease has also occurred in the number of sick admitted to the various workhouses, and to the number suffering from fever and other contagious diseases.

At the recent examinations for the Indian Medical Service Dr. Charles, who obtained first place, was a most distinguished student of the Queen's College, Cork, gaining all the scholarships and prizes of his course, and the three exhibitions at its close. He is also a Gold Medalist of the Queen's University, graduating with first honours.

Dr. Michael Kinane of Templemore, Tipperary, died on the 11th inst., after two hours' illness. The deceased gentleman had been married only a few days.

The Rev. Dr. Egan, late President of the Killaloe Diocesan College, has been appointed a Fellow of the Royal University of Ireland.

Small-pox has disappeared from Dublin for upwards of a year, but it exists to a slight extent in Belfast and Clonmel.

AMBULANCE CLASSES FOR THE POLICE.—At Scotland Yard last week certificates were presented to seventy-nine police officers who had passed the examination of the St. John Ambulance Association. Dr. Sieveking presided; and there were also present—Dr. Steet, medical officer, General Post Office; Colonel F. Duncan, R.A., director of the Association; Captain H. C. Perrott, secretary; and others.

ON Saturday afternoon, the 12th inst., the remains of Dr. James Miller, of Great Percy-street, Clerkenwell, were interred in Kensal-green Cemetery. Dr. Miller, who died somewhat suddenly, had been one of the police divisional surgeons of the G or Clerkenwell division for some ten years, and the police, to show their respect, gave him a public funeral.

PARIS.

(From our Special Correspondent.)

THE last *Compte Rendu* of the Biological Society contains the description of a new instrument presented to the Society at a recent meeting by Dr. Danillo of St. Petersburg and called the "Reflexometer." It is used for measuring the force required to obtain the phenomena known as "reflexes" or myotatic movements, as well as for indicating the exact moment at which percussion takes place. The inventor thinks that investigation as to the changes of medullary reflectivity under pathological conditions will be rendered more exact when its physiological variations are better known. The instrument consists of a metallic rod, fifteen centimetres long by five millimetres wide. The free extremity carries the percutor, whilst the other is movable around an horizontal axis, at the junction of a second rod parallel with the first and its handle. A glance at the figure kindly furnished by the maker, M. Galante, will make matters clearer. Percussion is obtained by a semicircular spring, one end of which is fixed at the junction of the rod and handle, whilst the other presses upon the rod. A segment of a circle, with a scale representing the force of the spring in grammes, is attached to the immovable part of the apparatus; while a cursor on the movable rod gives the reading. The fork on the lower branch is applied to the muscle or tendon under examination, and the percutor is raised by a little transversal bar in front of the cursor to the required height. The contact of the percutor with the tendon corresponds with the parallelism of the two rods, and with the contact of a screw on the movable branch, with the insulated binding screw of the immovable branch. This is announced by a Deprez signal worked by a battery, the rheophores of which are connected, one with the binding screw already described, and the other with a screw placed at the junction of the handle and rod. Dr. Danillo's apparatus is the modification of an instrument proposed for the purpose and described by M. Brissand in his inaugural thesis.

The same bulletin contains a communication by Professor Charles Bouchard, on the presence of ptomaines, or cadaveric alkaloids, under some circumstances, in the urine. The investigations of Brouardel and Boutney brought to light a test which shows that there is a great analogy between these alkaloids and the poisonous fungi. On the other hand, the ptomaines only appear in animal matter where microscopic vegetable organisms are found. Hence the supposition that cadaveric alkaloids are the product of dissimilation of vegetable organisms. If bacteria living in dead animal matter produce ptomaines, it is possible that the bacteria of a living animal organism may produce analogous substances. Starting from this hypothesis, Professor Bouchard submitted the urine of a number of patients to analysis, after having carefully arranged their diet, and excluded all alkaloids from their medication. In order also to prevent any fermentation or putrefaction, the urine was discharged into a recipient containing a sufficient quantity of powdered boracic acid to saturate it. These researches were made in a number of cases of typhoid fever, two of infectious pneumonia, one of infectious pleurisy, and one of

icterus occurring in the course of a phthisis, and which was judged to be infectious from the coincidence of an infectious nephritis. The chemical process employed for the detection of the alkaloids invariably failed to reveal their presence in healthy urine. This is not in accordance with the results obtained by M. Pouchet, but the contradiction may be due to a difference in the mode of research. But in the infectious cases the ptomaïnes were always to be found. The quantity generated daily in a case of typhoid does not appear to exceed a milligramme. Whether the toxic effects of the product have any bearing upon the symptoms of the disease remains to be seen. Some experiments with hypodermic injections in rabbits and guinea-pigs were negative, in one instance only giving rise to dilatation of the pupil and acceleration of the heart's action.

In a former letter, Sept. 3rd, 1881, an account was given of a new treatment for small-pox, advocated by Dr. Ducastel before the Academy of Medicine. It consisted in the administration of a mixture containing opium and ether, of a second mixture containing perchloride of iron, of the hypodermic injection of ether, and the administration of alcohol. Since May 1st, Dr. Dreyfus-Brisac has been in charge of some small-pox wards, at the Hospital St. Antoine, where he has had a full opportunity of testing its value. His report is published in the current number of the *Gazette Hebdomadaire*. The treatment was at first carried out in its entirety, but after a time the perchloride of iron was omitted except in hæmorrhagic cases. The injections of ether were disagreeable, but not enough to cause any of the patients to refuse them. Sometimes they caused a painful inflammatory induration, which occasionally terminated in a purulent collection, requiring incision, or in a small superficial sore which heals up rapidly. The effect of the treatment on the general intoxication remains problematic, but its influence on the eruption is undeniable, and the description given by M. Ducastel is confirmed in every particular (see THE LANCET, Sept. 3rd, 1881). The papules on the mucous surfaces abort in the same way as those on the skin, and since the introduction of the treatment the necessity for gargles has almost entirely been done away with. Considered in connexion with the eruption only, small-pox is transformed into varioloid, and the serious complications of the third period of the disease scarcely ever occur; one patient only having succumbed from this cause. In many of the cases a severe eruption of boils, without any evil consequence, occurs during convalescence. Dr. Dreyfus-Brisac has always endeavoured to carry out the treatment with opium and ether, but he thinks that the former plays the more important part, for when the mixture, as occasionally happens, is rejected by the stomach, and the treatment is practically reduced to the hypodermic injection of ether, the result is far from being as satisfactory as with the mixed medication.

M. Felizet, surgeon to the Paris hospitals, believes that he can cure diabetes with bromide of potassium, and has made a communication both to the Academy of Sciences and the Academy of Medicine to this effect. He states that, having had occasion to administer this drug for nervous symptoms, occurring in a glycosuric patient, the sugar diminished coincidently with the improvement of the nervous condition. The administration of bromide to animals suffering from experimental glycosuria (from pricking the fourth ventricle) confirmed this result; and during the last six years M. Felizet has satisfied himself of the curative effects of the remedy in no less than fifteen carefully observed cases. Bromide of potassium is mentioned in nearly all the text-books amongst the medicines useful in diabetes; and Begbie and Flint have especially studied its action in this disease. Such an extraordinary success as that described by M. Felizet is, however, quite unknown to physicians. Let us hope that the discovery of our chirurgical *confrère* may be confirmed by future experience, and that this incursion into the domain of medicine may not prove the wisdom of the old saying concerning the *sutor* and the *crepida*.

The world is indebted to M. Naquet, the celebrated chemist, politician, and advocate for divorce, for the invention of ——— a new hair dye! The *Figaro* having discovered the fact that a patent had been taken out some time since by a person of this name, propounded the question whether the inventor was really the well-known deputy. M. Naquet has replied in a witty letter explaining the circumstance. He says that he had been strongly impressed two or three years ago by the report of Dr. Dubrisay to the *Conseil d'Hygiène*, on the poisonous composition of most hair dyes. A minister of the Empire had even lost his life in consequence of their use. Since the ridiculous practice of staining the hair exists and that satire is unable to put it down, M. Naquet thought it would be a humane enterprise to seek some harmless substitute for the dangerous compounds generally employed. The dye for which he took out a patent is a mixture of subnitrate of bismuth and hyposulphite of soda. Being unwilling that his name should be used in connexion with it, or to engage in its manufacture or sale himself, M. Naquet had intended to make over his rights to someone who should work the patent for the benefit of all but in the midst of his numerous occupations he had forgotten all about it. At the present time the patent has lapsed and the invention become common property.

Paris, August 15th, 1882.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Monday the Artisans' Dwellings Bill passed through committee and was reported without amendments to the House. The Poor-law Amendment Bill was read a third time and passed, as was also the Artisans' Dwellings Bill on Tuesday.

In the House of Commons on Thursday, the 10th inst., a return was presented, on the motion of Mr. Dodson, containing a list of the alkali and other chemical works registered under the Act of 1881.

On Friday, a petition for redress of the grievances of militia surgeons was presented from the South Midland Branch of the British Medical Association.—A copy was presented of the half-yearly report to the Lord Chancellor of Lunacy Visitors.

On Saturday, the 36th report of the Commissioners in Lunacy was presented.

On Monday, the Lords' amendment to the Commons' amendments of the Lunacy Registration Bill was agreed to.—An abstract of the accounts for 1881 of county and borough asylums was presented.—Mr. O'Donnell put a fresh series of questions to the Secretary for India with reference to the mortality in Indian gaols, and Lord Hartington again replied that the Government of India were not of opinion that it was caused by the reduced dietary, and that he saw no grounds for imputing neglect of duty to the prison officials.

On Tuesday, the 31st report on the district criminal and private lunatic asylums of Ireland was presented, as also was the annual statistical report on the health of the navy.

Carandonagh Water-supply.

Mr. Healy gave notice that he would ask the Chief Secretary to the Lord Lieutenant of Ireland if he had any objection to lay upon the table the report of Professor Leebody's analysis of the Carandonagh waters, in the year 1875-6, for the Local Government Board; whether it is the fact that the town contains 750 inhabitants, exclusive of workhouse, hospital, military, and constabulary barracks, and that for over eleven years the water-supply has been insufficient and very bad; whether, during the same period, typhus and typhoid fever were never absent summer or winter; if two dispensary doctors have died from fever in this town; whether the present doctor immediately after his appointment suffered for many months from fever; whether many other inhabitants of the town have suffered in the same way; and whether, under all the circumstances, anything can be done by the Local Government Board to insist upon a proper supply of water being obtained.

Surgeon M'Gann.

Mr. O'Shea gave notice of the following question to the Secretary of War:—Whether the cases of Surgeon M'Gann, and other officers of the Medical Department, whose distinguished services in South Africa were mentioned in General Orders and Despatches, have been considered.

On Wednesday, the annual report on sanitary measures in India was presented.

On Thursday, in reply to Mr. O'Shea, Mr. Childers stated that several medical officers did excellent service in the late war in South Africa, of whom Surgeon M'Gann was one.

They had been thanked for their services, and their conduct had been duly recorded.

The Norwich Vaccination Inquiry.

Mr. Dodson, in reply to Mr. Hopwood, stated that he had received a report from the medical inspector who visited Norwich with regard to the deaths which were attributed to the effects of vaccination. In consequence of that report, he had directed a public inquiry to be held; and considering the gravity of the cases, and the strong public feeling regarding them, he proposed to associate with the local inspector one of the Local Government Board's most experienced general inspectors in the conduct of the inquiry.

Obituary.

DR. ARTHUR G. REID, OF HANKOW, CHINA.

OUR obituary list contained a few weeks ago the announcement of Dr. Reid's death at Hankow, on June 20th, the news having been received by telegram. A widespread circle of friends in the East and at home will have learnt with much sorrow that so promising a career has been brought to a premature close. Dr. Reid was educated at the University of Edinburgh, and after having been house-surgeon to the late Professor Spence, with whom he formed ties of close friendship, settled at Hankow in China, in practice amongst the foreign residents. His professional zeal not finding sufficient scope amongst the small foreign population, he conducted gratuitously a hospital for Chinese under the auspices of the London Missionary Society; and it was in this field that he made the numerous clinical observations regarding leprosy which were published in the *China Customs Gazette*, and which are quoted in all modern standard works on that disease.

Dr. Reid recently visited Europe and enlarged his experience by visits to the hospitals of Edinburgh, London, Paris, and Vienna, keeping steadily in view the acquisition of the modern methods of investigation in diseases of the nervous system, with special reference to their application to the study of leprosy. He intended to remain only a short time in China; and the chief inducement that reconciled him to the prospect of a further stay in Hankow was the hope of being able to throw some further light on that obscure disease. We understand that Dr. Reid had accumulated extensive notes in reference to the distribution of the disease in Central China; and it is to be hoped that some means may be taken of rendering the information they contain available to the profession.

Dr. Reid died suddenly of sanguineous apoplexy, when apparently in his usual health. He was a little over forty years of age.

Medical News.

UNIVERSITY OF LONDON.—The following is the list of candidates who have passed the recent Intermediate Examination in Medicine:—

FIRST DIVISION.

Anderson, George Elliott Caldwell, Guy's Hospital.
Bowes, William Henry, Guy's Hospital.
Brock, James Harry Ernest, University College.
Carr, John Walter, University College.
Elliott, John, B.Sc., Owens College and St. Barthol. Hosp.
Hayman, William Speed, King's College.
Innes, Charles Barclay, St. Bartholomew's Hospital.
Jones, Fredk. Wm Caton, St. Bartholomew's Hospital.
Jones, Samuel Cromwell, University College.
M'Cabe, William Alexander Bowes, University College.
Purslow, Chas. Edwin, Queen's and Mason Colls., Birmingham.
Spong, Charles Stuart, B Sc., Guy's Hospital.
Watson, William Ivens Buswell, Guy's Hospital.
Wells, George Lee, St. Bartholomew's Hospital.
Woolbert, Henry Robert, University College.

SECOND DIVISION.

Adie, Joseph Rosamond, University College.
Andrews, Charles, University College.
Arkle, Charles Joseph, University College.
Barnett, Lawrence, University College.
Bernard, Letitia Caroline, Lond. School of Medicine for Women.
Brogden, Richard William, Guy's Hospital.
Caldecott, Charles, Guy's Hospital.
Chapman, Harry Cecil, St. Bartholomew's Hospital.
Cocking, William Tusting, University College.
Cooper, Henry Charles Evans, Guy's Hospital.
Dutt, Upendra Krishna, B.Sc., St. Mary's Hospital.
Fenton, Herbert Alfred Hill, St. Thomas's Hospital.
Fisher, Henry Holdrich, St. Bartholomew's Hospital.
Flemming, Percy, University College.
Frames, Alfred Cromwell, St. Bartholomew's Hospital.
Francis, Alfred George, St. Bartholomew's Hospital.
Hinds, Frank, University College.
Hodgson, Gerald George, King's College.
Hurst, Walter, Owens and University Colleges.
Irvin, Frederic David, University College.
Joborns, William, Queen's and Mason Colleges, Birmingham.
Lankester, Herbert Henry, St. Thomas's Hospital.
Little, Arthur Nicholas, Bristol Medical School.
Mamby, Langton Philip, Westminster Hospital.
Penrose, Francis George, University College.
Pettifer, Edmund Cleaver, St. Bartholomew's Hospital.
Pilgrim, Herbert Wilson, University of Edinburgh.
Randell, Reginald Maurice Henry, Guy's Hospital.
Robinson, Henry Betham, St. Thomas's Hospital.
Rouse, Rolla Edward, St. Thomas's Hospital.
Sollick, James Henderson, Guy's Hospital.
Stragnell, Walter Thomas, St. Bartholomew's Hospital.
Swain, James, Westminster Hospital.
Taylor, Alfred Ernest, Guy's Hospital.
Tratman, Frank, Bristol Medical School.
Turner, Philip Dymock, University College.
Vernon, John James Dean, Guy's Hospital.
Vince, John Foster, Queen's and Mason Colls., Birmingham.
Voelcker, Arthur Francis, University College.
Whitcombe, Philip Percival, St. Mary's Hospital.
Williamson, Richard Thomas, Owens College.

EXCLUDING PHYSIOLOGY.

FIRST DIVISION.

Carpenter, George Alfred, St. Thomas's Hospital.

SECOND DIVISION.

Freeland, Freeland John, King's College.
Lankester, Alfred Owen, St. Bartholomew's Hospital.

PHYSIOLOGY ONLY.

SECOND DIVISION.

Gross, Charles, Guy's Hospital.
Shillito, Henry, Birmingham School and Mason College.
Tilly, Alfred, St. Mary's Hospital.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 10th:—

Cox, Roland Frederic, Twickenham.
Myddelton-Gavey, Edward Herbert, Littlehampton.
Smith, James Edward, Hammersmith.
Thomas, Arthur William, Chelsea.
Treasure, William Beeson Crawford, Crewkerne.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Harry Appleton, Charing-cross Hospital; Chas. G. Gummer, St. Bartholomew's Hospital.

GLASGOW UNIVERSITY.—In the graduation list which appeared in THE LANCET of last week, the name "Gume" should have been printed *Grime*.

MR. RICHARD AXFORD, late medical officer for the workhouse and third district of the Bridgwater Union, has received a superannuation allowance of £25 a year.

A LARGE number of cases of insolatio at New York are reported, resulting from the intense heat which has characterised the last few weeks.

THE scarlet fever epidemic at Accrington is stated to be on the increase. It has been decided to close all the schools of the town.

IT is proposed to celebrate the centenary of the Hull Infirmary, with the object of enlarging, improving, and endowing the institution, and of obtaining the addition of a convalescent home in connexion with it.

ROYAL BOTANIC SOCIETY.—The forty-third anniversary meeting of this Society was held last week at the Gardens, Regent's Park, Dr. H. A. Pitman in the chair. The financial condition and other matters in connexion with the Society were described by the report as satisfactory.

THE BRITISH ASSOCIATION.—The arrangements for the fifty-second annual meeting of this Association, which is about to be held at Southampton, extending from Wednesday, the 23rd inst., to Thursday, the 31st, are now completed. The first general meeting will be held on Wednesday evening at the Victoria Skating Rink, when Sir John Lubbock will resign the chair to Dr. C. W. Siemens, and the president elect will give his inaugural address. On Thursday evening there will be a *soirée* at the Hartley Institution; on Friday evening a discourse on the "Tides," by Sir William Thomson, M.A., in the Skating Rink; on Monday evening a

discourse on "Pelagic Life," by Mr. H. N. Moseley, M.A., at the Skating Rink; on Tuesday evening a *soirée* at the Hartley Institution; and on Wednesday afternoon the concluding general meeting at the Skating Rink. The several sections will meet daily at 11 o'clock in the morning from Thursday to Tuesday, both inclusive, in various public buildings. Amongst the excursions arranged for will be one to Netley Abbey and Hospital, where a garden party is to be given by the Surgeon-General and officers of the Army Medical Department.

THE death of Dr. W. H. Cook, medical officer of the Hampstead Infirmary, affords another illustration of the risks attending medical practice. Dr. Cook fell a victim to an attack of scarlet fever contracted from a patient whom he was attending for the disease.

DISASTERS AT SEA.—A Society has at last been formed for the promotion of increased places of safety on our coasts for fishermen and mariners. It is proposed that convict labour be used in the construction of these harbours. Mr. F. Johnson, Norman-road, St. Leonards-on-Sea, is the hon. secretary.

A CENTENARIAN.—On Monday evening Mrs. Burton died at her residence, Whitecross-street, Barton-on-Humber, aged 100 years. She had lived there all her life, except a few years spent in domestic service. The old lady was born on August 1st, 1782, and therefore attained her hundredth year on the 1st inst.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—At the quarterly general meeting of the Association to be held in the rooms of the Medical Society of London, Chandos-street, Cavendish-square, on Friday (this day), at 4 P.M., Dr. G. Shearer, F.L.S. (formerly of China), will read a paper on "Recent Apologists for the Opium Trade."

SEWER VENTILATION.—At a meeting of the Works Improvement Committee, Hove, on the 22nd ult., a communication was read from Mr. Paddon, of the Brighton and Hove General Gas Company, granting permission to the Commissioners to erect a shaft inside their works at Hove to ventilate the St. Aubyn's sewer, upon their undertaking to do the work to the company's approval, to remove the pipe and restore the ground upon receiving seven days' notice, to pay the sum of 1*s.* per year as rent, and to keep the Company clear of all expense in connexion with the work. The committee recommended that the surveyor be directed to carry out the proposed works forthwith, at a cost not exceeding £15. The same committee also recommends that the surveyor be directed to prepare and bring up plans and estimates of the cost of carrying out the necessary works for connecting the public sewers. At their next meeting (on the 5th inst.), the surveyor produced a specification of the works necessary to be carried out for connecting the sewers, and stated that he estimated the cost of carrying out such works at the sum of £2580. The committee recommend that the plans and estimate of the cost of carrying out the necessary works for connecting the public sewers be approved, and that the Board be recommended to carry out such works by contract; the sum required for the same to be borrowed under the powers of the Public Health Act, 1875.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ADCOCK, HAROLD, M.R.C.S., has been appointed Medical Officer for the Corby District of the Kettering Union.

CLAYWORTH, C. CREASY, L.R.C.P.Ed., M.R.C.S., has been appointed Resident Medical Officer to the Sydney Hospital, Australia.

CLOUGH, MORLEY EDISON, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Hambledon District of the Droxford Union.

DAVISON, J. T. R., M.D., C.M.Ed., has been appointed Senior Resident House-Surgeon to the Royal Southern Hospital, Liverpool, vice J. M. Chisholm, M.A., M.D.Edin., M.R.C.S., resigned.

DENNE, T. V. DE, M.R.C.S., L.R.C.P., has been appointed Medical Officer and Public Vaccinator to the No. 2 Rowley Regis District of the Dudley Union, vice H. R. Ker, resigned.

DURDIN, ROBT. CHAS. GARDE, L.R.C.S., L.K.Q.C.P.I., has been appointed Medical Officer for the Desford District of the Market Bosworth Union.

FITZPATRICK, M. M., M.B., C.M.Ed., has been appointed Junior Resident House-Surgeon to the Royal Southern Hospital, Liverpool, vice W. H. Irvin Sellars, M.B.Ed., M.R.C.S., promoted.

LYON, ADAM CORBETT, M.B., C.M.Aber., has been appointed Medical Officer for the Rillington District of the Malton Union.

MANN, JOHN DIXON, M.D., M.R.C.P., has been appointed Physician to the Salford and Pendleton Royal Hospital.

MONTGOMERY, J. W., F.C.S., has been appointed Public Analyst for the County of Westmoreland, vice Siebold, resigned.

O'CONNOR, BERNARD, M.D., M.R.C.P.Lond., has been appointed Physician to the Hospital for Consumption and Diseases of the Chest, Mount Vernon, Hampstead, vice Dr. Burrell, resigned.

ROE, EDWIN HODGSON, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Cadishead District of the Barton-on-Irwell Union.

SCHMIDT, ALFRED EDWIN, L.R.C.P.Ed., L.S.A.Lond., has been appointed Medical Officer for the Third District of the Bethnal-green Union, vice Richards, resigned.

SELLARS, W. H. IRVIN, M.B.Edin., M.R.C.S., has been appointed Second Resident House-Surgeon to the Royal Southern Hospital, Liverpool, vice J. T. R. Davison, M.D., C.M.Edin., promoted.

SPICER, R. H. SCANES, B.Sc.Lond., M.R.C.S., L.S.A.Lond., has been appointed Resident Medical Officer to St. Mary's Hospital.

SPURGIN, THOMAS, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Third District of the Ongar Union, vice Potter, deceased.

STEVENSON, RALPH DRUMMOND, M.B., C.M.Glas., has been appointed Resident Surgeon to the Daylesford Hospital, Australia.

SYMONS, CROFT GEORGE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Bedfield District of the Hoxne Union.

WEBB, CHARLES FREERE, F.R.C.P.Ed., M.R.C.S., has been appointed Public Analyst for the Borough of Basingstoke.

Births, Marriages, and Deaths.

BIRTHS.

FINZI.—On the 16th inst., at Sutherland-gardens, the wife of Dr. L. M. Finzi, M.R.C.S., L.R.C.P.Lond., of a daughter.

HARDWICK.—On the 13th inst., at Pillar House, Needham Market, Suffolk, the wife of Fredk. S. Hardwick, M.D., of a daughter.

HUTCHINSON.—On the 10th inst., the wife of S. J. Hutchinson, M.R.C.S. &c., of Brook-street, Grosvenor-square, and Brondesbury, N.W., of a son.

PHILLIPS.—On the 5th inst., at Woodville, New Ferry-park, Cheshire, the wife of Edward T. M. Phillips, M.R.C.S., L.D.S., of a daughter.

PIERREPONT.—On the 4th inst., at The Common, Ealing, the wife of Dr. E. Pierrepont, of a daughter.

RICE.—On the 8th inst., at the Infirmary, Plumstead, the wife of George Rice, M.B., C.M., of a daughter.

SMITH.—On the 13th inst., at George-street, Hanover-square, the wife of Eustace Smith, M.D., F.R.C.P., of a son.

MARRIAGES.

BRISBANE—WATSON.—On the 10th inst., at the Presbyterian Church, Colebrooke-row, by the Rev. Thain Davidson, D.D., James Brisbane, M.D., of 21, Park-road, Regent's-park, to Mary Jane, eldest daughter of the late William Watson, Esq., of 30, Highbury-hill, N.

DOCKRELL—OLDFIELD.—On the 9th inst., at St. Jude's Church, Kilmainham, Dublin, by the Rev. Thos. Mills, A.M., assisted by the Rev. T. Aldwell, Morgan Dockrell, B.A., M.B. Dub. Univ., of Old Kent-road, London, S.E., youngest son of the late Thomas Dockrell, Esq., J.P., of Monkstown, co. Dublin, to Emily, only daughter of the late Alexander Oldfield, Esq., of Nottingham, and granddaughter of the late Lieutenant Ball, R.N.

GRAHAM—PONDER.—On the 15th inst., at St. Matthew's Church, Oakley-square, J. Campbell Graham, M.D., youngest son of the Rev. W. Graham, of Bonn, D.D., M.R.I.A., to Mary Jessie, second daughter of the late Stephen Ponder, Esq., of Canton, and Hampton, Middlesex.

HARRIS—SMITH.—On the 8th inst., at Patterdale Church, by the Rev. W. Pattinson, M.A., Vicar, Alfred Harris, M.B. & C.M., of Dalston, son of the late Anthony Harris, of Middlesborough, to Grace Elizabeth, widow of the late C. E. Smith, M.D.

DEATHS.

CHAVASSE.—On the 13th inst., at Duchess-road, Edgbaston, Samuel Chavasse, M.R.C.S., late of Newhall-street, Birmingham.

COOK.—On the 2nd inst, at Abercrombie Villas, Hampstead, William Henry Cook, M.D., aged 57.

GILES.—On the 8th inst., at his residence, Pendreath, Torquay, Richard Giles, M.D., late of Oxford.

TENNANT.—On the 11th inst., suddenly, at Lambert-road, Brixton, William D. Tennant, M.R.C.S., youngest son of the late Rev. Sanderson Tennant, M.A., of Kensington, aged 32.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HOSPITALS IN THE PUNJAB.

SURGEON-GENERAL S. C. TOWNSEND'S Report of the Punjab Dispensaries for the year 1880 shows that 181 hospitals and dispensaries were open at the commencement of the year, four new dispensaries were established and one closed, leaving 184 in operation at the close of the year. 34,729 in-door and 1,333,700 out-door patients were treated, and 3531 major and 100,803 minor operations performed; the percentages of men, women, and children treated were 64, 19·5, and 16·5. Dr. Townsend notes as the imperfections of the dispensary system: (1) Want of inspection; (2) consequent suspicion of correctness of statistics; (3) employment in some districts of hakims of very doubtful qualifications; and (4) want of system in allocation of dispensaries. These matters are engaging the attention of Government.

Mr. Moore.—Our correspondent's letter has been forwarded to the advertiser.

"THE ABORTIVE TREATMENT OF GONORRHŒA."

To the Editor of THE LANCET.

SIR,—Since reading the able papers contributed to your pages by Mr. Watson Cheyne, I would say, relative to the abortive treatment of gonorrhœa, that I have used two-drachm doses of sandal-wood oil three and even four times a day in the prodromatory and inflammatory stages of the disease, especially in "primary cases," with well-marked results. The purulent secretion has been completely arrested within thirty to forty-eight hours, rarely continuing on to seventy-two hours. The *modus operandi* I cannot explain, but have in these followed up the cessation of the discharge for three or four days by urethral injections of chloride of zinc (preferring the liquor of the British Pharmacopœia in the preparation of the same), as, in some instances where I omitted the injections, I found the discharge reappear on the discontinuance of the oil. I might add that by the above method of treatment the inflammatory sequences are reduced to a minimum. I do not recollect whether the remedy has ever been suggested before, but in my Indian experience I have obtained very beneficial results in the treatment of paroxysmal hæmaturia with large doses of the oil, though not so large as those suggested above.—I am, Sir, faithfully yours,

C. H. F. UNDERWOOD, L.K.Q.C.P.I., &c.

Edinburgh, August 12th, 1882.

To the Editor of THE LANCET.

SIR,—In Mr. Watson Cheyne's and Dr. Ryley's treatment of the above subject I see no mention of "hydrastin," which, from an extensive practice, I can strongly recommend. The best treatment I have found might be summed up with the following:—Internally, three minims of the oil of turpentine and one ounce of infusion of buchu, three times daily. Locally, warm-water injection, followed directly by the following: Two drachms of hydrastis Canaden., two drachms of subnitrate of bismuth, and four drachms of glycerine, with sufficient water to make four ounces, which should be retained in the urethra as long as possible. The nitrate of silver, sulphate of zinc, &c., locally I found worse than useless, and from personal experience I should certainly never prescribe any of them.

I am, Sir, yours, &c.,

Abergele, August 14th, 1882. A STUDENT.

Enquirer (Edinburgh).—Messrs. Spottiswoode's, New-street-square, London.

BICYCLE-RIDING.

To the Editor of THE LANCET.

SIR,—I should be glad if any of your numerous correspondents would inform me if their experience justifies them in concluding that bicyclists are as a class unduly affected with rupture, and whether bicycle-riding has a pronounced tendency to produce that infirmity.

I am, Sir, yours obediently,

August 14th, 1882. F.R.C.S.

MEDICAL ÆSTHETICS.

At the banquet given at the annual meeting of the State Medical Society of Arkansas (says the New York *Medical Record*) there were ingenious accompaniments to the feast. At each plate was a little white roll, in appearance suggesting a surgeon's bandage, and labeled "Epicurean bandage." Upon unrolling this it was found to consist of a yard of fine gros grain silk ribbon, upon the middle third of which was printed, in red letters, the bill of fare, in the form of a prescription, in Latin phraseology, the perusal of which afforded much amusement. At each plate also lay a model of a surgeon's saw in stiff card, upon which were printed the toasts, with the names of those who were to respond to them.

Mr. McNaught does not say anything in his letter to explain that part of his views which shocked us most—the proposal that, to save the ratepayers, the unfortunate officer of health should be required to attend all infectious cases for his present salary. We are glad that he approves of the notification of disease as advocated by us.

SUCCESSFUL PRECAUTIONARY MEASURES AGAINST PUERPERAL FEVER.

To the Editor of THE LANCET.

SIR,—Noticing a fatal case of puerperal fever directly due to scarlatina poison (recorded in last week's LANCET), I thought the following case might interest your readers.

On July 31st I was called to see the child of Mrs. M——. On arrival I found the child suffering from scarlet fever. At the same time I was requested to see an aunt of the child, who was ill, and whom I found suffering from scarlet fever also. Noticing that the mother was pregnant, and to all appearances in an advanced stage, I strongly advised the immediate removal of both the patients. The mother, however, would not hear of the child being removed, but allowed her sister to be taken to the hospital, where she remains at the present time, having had a severe attack, her throat being much affected. The child subsequently skinned very freely. On August 5th the mother was taken with labour pains, and was delivered of a child at 6 P.M., in the same room in which the child was, there being no other room in which to isolate the case. I had the woman placed between sheets impregnated with carbolic as soon as labour set in; and in place of using lard to lubricate the fingers for making examinations, carbolised oil was employed. All the napkins used then and subsequently were saturated with the same. The case progressed favourably, no bad symptoms intervening.

I should be glad to know if any of your readers have tried the same precautions in similar cases, and if with the same results; and also whether any of them have ever had similar cases where they have taken no precautions with as favourable results, as I would like to satisfy myself that it was really the precautions taken that prevented the development of puerperal fever, and not the insusceptibility of the patient.

I am, Sir, yours, &c.,

H. G. SWORN, L.K.Q.C.P., &c.

Liverpool-road, N., August 15th, 1882.

Endymion.—The rule varies in different places; but either practice is courteous, and the courtesy should be accepted and reciprocated.

PUERPERAL CONVULSIONS.

To the Editor of THE LANCET.

SIR,—About the year 1875—I cannot lay my hand on my notes—I treated a case of puerperal convulsions by injection of morphia with success. I had administered chloroform previously, but finding the fits recurring on ceasing to give the anæsthetic, I thought to try the hypodermic injection of morphia, which had the desired effect. I have used it since in a case in which it failed to cause more than a diminution in severity, the patient of another medical man, whom I saw rather late in consultation, dying soon after. I have administered the injections advantageously in non-puerperal convulsions.

I am, Sir, your obedient servant,

RICHARD LEIGH, M.R.C.S.,

Assistant Medical Officer to the Liverpool Lying-in Hospital and Ladies' Charity.

Liverpool, August 11th, 1882.

Mrs. Annabella Russell.—We know of no source for the information desired other than the various reports of the local medical officers of health.

MEDICAL EVIDENCE WITHOUT PAYING FOR IT.

To the Editor of THE LANCET.

SIR,—The following represents a class of cases which I believe is getting rather common now, and which I think is hardly fair to medical men. I am called up early and find the patient dead. I send a certificate to the coroner's officer, stating I had seen the man a fortnight previously, and the facts of the case, requesting to know if there is any need of an inquest. The widow comes back and says that her husband's body is removed to the mortuary, and there would be an inquest. I hear no more until I see the report in the local paper, when I find that my information to the coroner is used instead of my evidence as a witness, and thus my fee is saved to the county. Is this the way that medical coroners are expected to treat their medical brethren?

I am, Sir, yours, &c.,

Highbury, August 16th, 1882. GEO. THOS. KEELE.

SUMMER SANITATION.

THE New York Board of Health, which has powers granted to few such municipal bodies by legislators, appoints each year fifty physicians as sanitary inspectors, who for five weeks in July and August inspect the tenement houses of the city, report the grossest nuisances to be abated, prescribe especially for the sick children of the poor, and distribute tickets to the excursions given by the various charitable associations.

Mr. W. B. Holdernest.—The remuneration is inadequate. Our correspondent should have had an understanding before giving evidence; but he should press his claim for two or three guineas a day more.

"SCOTCH MEDICAL SCHOOLS."

To the Editor of THE LANCET.

SIR,—"Alpha's" letter, which puts forward the cheapness of class and hospital fees as a subsidiary attraction to the Scottish schools, may be held to apply to the Glasgow of the past, but certainly not to the Edinburgh of the present. The total minimum of the university course is put at £107 odd in the Calendar, but this does not include practical classes, and allows only one course of dissecting. It really runs up to something like £130 or £140. The cheapest (and thereto most excellent) teaching I know of is at Leipsig, where a class of laryngoscopy costs 15s., and a full course of ophthalmoscopy and Augen-klinik £1. Board and lodging are perhaps about the same in Edinburgh as in London, but the "conditions of life" that surround the student are more comfortable. There is plenty of inducement to take walking excursions into the country; then the sea is not far off, and there are plenty of tennis-courts and an excellent, if somewhat remote, cricket-field and club. The latter is chiefly kept up by the English and colonial students, as cricket, although rooting, is not quite a national game in Scotland. Rugby, Harrow, Winchester, and Marlborough men are usually to be found in the eleven *plus* a contingent from Australia and Canada. Scotland may well be proud that her capital attracts students of medicine from all parts of the world to the tune of about 2000. Only a small proportion of these are Scotchmen, which is not to be wondered at when we consider what the population of Scotland is, and the fact that there are schools at Glasgow and Aberdeen. Of the university graduates of 1881 only 57 out of 128 were natives. I have met a good many foreigners in my time—Frenchmen from Mauritius, Indian natives, a Russian, a Pole, men too from our remotest colonies.

I am, Sir, yours faithfully,

Edinburgh, August 12th, 1882. BETA.

Enquirer.—Both particulars are essential to be known by the purchaser. It is enough to advertise the cash receipts.

L.R.C.S.E.—No.

"LAWN TENNIS ARM."

To the Editor of THE LANCET.

SIR,—With reference to the correspondence which has appeared in THE LANCET on the above subject, allow me to report a case which I consider almost perfectly answers the description of the injury given by Mr. Morris.

Mr. G. W—— last winter, during a very hard-fought game of racquets, suddenly after a back-handed stroke felt severe pain over the pronator radii and teres, which incapacitated him from taking further interest in the game, because, as he described it, he could not hit a single ball. There were swelling and tenderness on pressure along the course of the pronator. Cold-water bandages and subsequently soap liniment gave relief. He can now play cricket, and bat half a day without the slightest inconvenience, but if he plays lawn tennis for an hour, the muscle gets so painful and stiff that he can scarcely use his arm. As in the former there is no back-stroke, it proves pretty conclusively that the back-stroke is the cause of the injury.

Mr. W—— is a well-known cricketer, very powerfully built, and all the year round in good condition, so that I do not think the present weight of racquets or tennis-bats likely to affect him; and he informs me that he always plays with a 13 oz. one, which is comparatively light.

I am, Sir, yours faithfully,

Over Darwen, August 9th, 1882. C. SUTCLIFFE, M.R.C.S. Eng.

A QUERY.

To the Editor of THE LANCET.

SIR,—I fancy I have had as much experience in the treatment of children as most medical men, but at the present time I have a case that rather foils me. Could any of your correspondents suggest any treatment for it? The patient is a female child, about four years of age. I was first called to see her about four months ago. She then seemed to be suffering from torpid liver, with urticaria and enlarged tonsil on the right side. She had the usual remedies and change of air, but she still has frequent daily attacks of the nettle rash, the enlarged tonsil still remaining, and the urine about normal in quantity, but turbid, as if containing mucus. In other respects the child seems well; her appetite is good; there are no symptoms of worms; no vaginitis. I have tried all the usual remedies—the alkaline saline, cod-liver oil with tonics, also warm baths and counter-irritation over the kidneys—but up to the present the patient remains *in statu quo*.

I am, Sir, yours faithfully,

August 15th, 1882. L.R.C.P.

COW'S MILK DURING THE PERIOD OF RUT.

To the Editor of THE LANCET.

SIR,—Some time ago a very intelligent patient made a suggestion to me in connexion with the artificial feeding of children, which I think of some importance and worthy of consideration by my professional brethren. I was in attendance on this gentleman's child, which nearly lost its life from diarrhœa and vomiting caused, I was informed, by the administration of milk of a somewhat doubtful character. This was the third attack of stomach and bowel derangement, occurring at intervals of *three weeks*. It was here that the father's suggestion came in: "Is it not possible, seeing that this child has got nothing but 'one cow's milk,' that the bowel complaint is due to natural changes in the milk incidental to the period of rut, which in the cow is every three weeks?" This was an aspect of the question which had never struck me before, but it is the case that when this child, after recovering from the attack in question, was put on the ordinary milk that was bought for general use in the house, it had no return of the bowel derangement.

As I have no very good opportunity for the study of this question, I should like to ask those who practice in the country whether they are aware of any facts confirmatory of my patient's suggestion. Does cow's milk really undergo any alteration in composition during the period of rut? and, if so, have they noticed any ill-effects from the use of such milk?

I am, Sir, yours sincerely,

Glasgow, August 15th, 1882. ALEX. NAPIER.

R.—Our correspondent is entitled to his fee. A midwifery engagement binds a practitioner, and has often been recognised as a sound basis for claiming the fee.

"BLOOD DIET."

To the Editor of THE LANCET.

SIR,—With reference to giving preparations of blood to delicate children, I have been experimenting for the last five years at the Royal Hospital for Children and Women with it. At Guy's *conversazione* last October I showed a specimen of dried blood dissolved in gelatine. I have come to the conclusion, after many trials, that the best way to prepare it is the following. A given quantity of blood is collected, and, before coagulation takes place, is mixed with three-parts of water, and kept in constant movement for some time, then gradually evaporated over a water bath at a temperature not exceeding 100° F. Very great care has to be taken to prevent coagulation. When the consistence of chocolate is reached, a higher temperature may be used to perfect drying. It should be reduced to a powder in a mortar. It is like coffee, with very little taste, but with a peculiar odour. If properly prepared it should be perfectly soluble in water. I commence for a child one year old with a teaspoonful during the day.

I am, Sir, yours faithfully,

ED. O. DAY,
Assistant-Surgeon to the Royal Hospital for Children, &c.,

August 12th, 1882.

M. R.—Our correspondent will find the information he requires in our Students' Number for Sept. 10th, 1881.

DOUBLE GINGLYMUS OF THE KNEE-JOINT.

To the Editor of THE LANCET.

SIR,—The following case I think must be a novel one, and, with your kind permission, I offer it as a small contribution.

Mrs. S—— I delivered of a healthy child three months ago, the right leg folded on the thigh in front, with the toes lying in the groin. In straightening the limb I found no difficulty until it arrived at a straight position, when there was a hitch, and some little difficulty in forcing the leg backwards. On achieving that I found the muscles strong enough to bring the limb back to the position in which I found it. There was complete absence of the patella—in fact, a hollow where it should have been.

My treatment was to contrive some means of keeping the limb in a straight position, allowing the natural movement of the joint. This I attained by having a piece of paroplastic felt shaped to the back of the thigh and also the calf, with a ginglymus joint between, allowing the required movement, with what ultimate result I am not able to say; but perhaps somebody more experienced and having met a similar case may be able to say it for me.—I am, Sir, your obedient servant,

Chelsea, August 14th, 1882. H. FISHER, M.D.

FEES.

To the Editor of THE LANCET.

SIR,—I was called last Sunday week by the police to see a man who was at an inn. I found him to be a lunatic, and certified to that effect, so that he might be taken away to safer quarters. On the following Tuesday I received a letter by post (which I did not get till 10 o'clock, being engaged out) from the police superintendent asking me to attend at the police-court (which is about four miles away) at 11.15 A.M. the same morning to give evidence before the magistrates against the man charged with being a lunatic at large. At great inconvenience I attended, and after giving my evidence, wrote out the usual certificate in such cases, when I was offered the fee of £1 1s., and was told the Court allowed no more, which was both for certificate and attendance there.

Now, I wish to ask if that is all the fees I can claim, for the usual fee of a lunacy certificate is £1 1s.; and in a case of assault about two months ago, before the same Court, I was allowed £1 1s. for giving my evidence there as a medical witness.—I am, Sir, yours faithfully,

August 14th, 1882. F. F.

ERRATUM.—In Mr. Walker's paper, published last week, on the increase of Carbonic Acid in the Atmosphere, page 220, line 21, for "animals," read *annuals*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Berkeley Hill, London; Mr. Price, London; Mr. Skirving, Edinburgh; Mr. Day; Mr. Underwood, Edinburgh; Mr. Chavasse, Birmingham; Dr. Napier, Glasgow; Mr. Scriven, London; Dr. P. Boerner, Berlin; Mr. Wright; Mr. S. Drew; Mr. Rushton Parker, Birmingham; Mr. Sworn, London; Mr. Lowns, Pakhor; Mr. Ledlard, Carlisle; Mr. Symons, London; Mr. Jackman, Coggeshall; Mr. Bull, Stony Stratford; Mrs. Russell, Sandhurst; Dr. Sydney, Hounslow; Mr. Mollett; Dr. Edis, London; Dr. Coombs, Castle Cary; Dr. Davy, Southernhay; Dr. Leslie Jones, Blackpool; Dr. Elder, Nottingham; Mr. Keele; Mr. Macnaught, Greenock; Mr. Schacht, London; Mr. Benham; Dr. Norman Kerr, London; Dr. Hubert Bruxelles; Dr. Lucas, Ahmedabad; Mr. Boys; Mr. Melhuish, Worcester; Dr. Downes, Kashmir; Mr. Holderness; Mr. Leigh, Liverpool; Mrs. Dance; Mr. Lupton, Stratford-upon-Avon; Mr. Walsham, Portsea; Mr. Bartleet, Edgbaston; Mr. W. H. Brown, Leeds; Mr. Rackley, High Wycombe; Mr. Pentland, Edinburgh; Mr. Coombs, Bedford; Mr. Pretty, Fressingfield; Mr. Wylie, Belfast; Mr. Saunder, Manchester; Mr. Brennan, Liverpool; Mr. Davidson, Bally Castle; Messrs. Debenham and Towson, London; Mr. Lloyd, Liverpool; Mr. Willey, Birmingham; Mr. Pelton, Tunbridge Wells; Mr. Elliott, Carlisle; Mr. Curme, Blandford; Sartorius; L.R.C.S.E.; W. X., Liverpool; Surgery, Kilburn; Biceps; Melampus; Doctor; Nemo; Pluribus; F. F.; Beta; Nemo; T. M.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Grant, Birmingham; Mr. Norman, Cheltenham; Messrs. Keith and Co., Edinburgh; Mr. Lowes, Ferry-hill; Mr. Blaker, Sussex; Mr. Browne, Douglas; Mr. Bayberry, London; Messrs. Howlett and Co., London; Messrs. Burgess and Co., London; Messrs. Isaacs and Co., London; Mr. Wilson, Edinburgh; Dr. Searle, Penzance; Mr. Carsan, Hull; Dr. Mitchell, Wigton; Dr. Brannigan, Liverpool; Messrs. Knight and Garrard, Rotherham; Mr. Smith, Birmingham; Mr. Corns, Oldham; Dr. Mitchell, Brockley; Mr. Lair, Birkenhead; Mr. Johnson, West Burton; Mr. Hodgkinson; Mr. Sutherland, Barnockfield; Mr. Hunt, Hull; Mr. Jones, Sheffield; Mr. Lyman, Stoke-on-Trent; Mr. Irving, Long Bennington; Messrs. Lucas Brothers, Baltimore; Mr. Kingley, South Shields; Messrs. Keene, Dundee; Mr. Atkinson, Rippondon; Dr. Blythman, Swinton; Mr. Binks, Wakefield; Messrs Theakston and Co., Scarborough; Dr. Preston, Bermondsey; Mr. Jeffery, Epsom; Mr. Underhill, Birmingham; Mr. Masterton, London; Mr. Young, Westminster; Messrs. Thew and Son, King's Lynn; Mr. Woodland, Uxbridge-road; Dr. Clarke, Folkestone; Dr. C. Hewett, London; Mr. Reynolds, Uttoxeter; Dr. Mullane, Nottingham; Dr. Frippier, Liverpool; Mr. Bryan, London; Dr. Knight, Rowrah; Mr. Swinson, Birmingham; Messrs. Linton and Co., Manchester; Medicus, Seaford; M.D., Lowestoft; Alpha, London; N. E., York; T. V. R., Islington; Beta-Midlands, London; C. S., Barnard Castle; W. J. B.; Decimus; Medicus, Clevedon; Medicus, Bacup; M.B., 7; O. A. W.; Assistant, Bishop-Midland; A.; Q. V. R.; Medicus, Wigan; A. B., Colchester; R. W.; Medicus, Sutton; W. B., London; Zero; Undergraduate; Medicus, Sheffield; F. E., Guildford; Medicus, Birmingham; P. A., Newport; Rector, Seaford; G. E., Bedford; W. T., Stepney; &c., &c.

Jewish Chronicle, Goole Weekly Times, Yorkshire Post, Port Elizabeth Telegraph, Greenock Telegraph, Bridgend Chronicle, &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, August 17th, 1882.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 11	30·27	E.	62	58	92	71	56	..	Overcast
,, 12	30·08	S.E.	63	60	115	82	53	..	Hazy
,, 13	29·91	S.W.	67	63	92	71	58	..	Hazy
,, 14	29·89	S.W.	65	62	113	74	58	..	Cloudy
,, 15	29·78	S.W.	65	60	104	70	58	..	Cloudy
,, 16	29·63	W.	55	53	99	62	50	·31	Raining
,, 17	29·84	N.W.	58	56	..	64	51	·02	Dull

Medical Diary for the ensuing Week.

Monday, August 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

Tuesday, August 22.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, August 23

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, August 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, August 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, August 26.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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Books and Publications	£0	5	0
Official and General Announcements	0	5	0
Trade and Miscellaneous Advertisements	0	4	6
Seven lines and under (each averaging ten words).			
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Front Page .. .. per Line	0	1	6
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Half a Page	2	15	0
An entire Page	5	5	0

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